SAAL-ZS Systems 415 Total Programs

Sorted By Organization PM Reports To, Then By ACAT Level

Organizations Included:

ASA(ALT) (i.e., Direct Reporting PMs) PEOs:

CG, SBCCOM AMD

CG, STRICOM AVN

DAR, SBCCOM GCSS

DSA, AMCOM IEW&&S

DSA, TACOM TAC MSL

JPO, Bio Def SMDC

TARDEC

Organizations Not Included:

CG, IOC PEOs:

CG, MTMC C3S

COE IS

DCSOPS STAMIS

DSA, CECOM USAMRMC

ORGANIZATION ASA(ALT) *Total: 2*

ACAT LEVEL IC *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Chemical Demilitarization	PM, Chemical Demilitarization	EMD/PFDOS	AAE	Mr. Hoeper

The Program Manager for Chemical Demilitarization (PMCD) is the executive agent responsible for destroying all U.S. chemical warfare related materiel while ensuring maximum protection of the public, personnel involved in the destruction effort, and the environment. Public Laws and the Chemical Weapons Convention (CWC) mandate destruction of the U.S. chemical agents and weapons by 29 April 2007. The Chemical Demilitarization Program encompasses three subordinate projects: Chemical Stockpile Disposal Project (CSDP), Alternate Technologies and Approaches Project (ATAP), Non-stockpile Chemical Materiel Project (NSCMP), and Cooperative Threat Reduction (CTR). The CSDP is responsible for destroying America's stockpiled chemical weapons, stored at eight sites in the continental United States and at Johnston Island in the Pacific Ocean. Operating incineration-based chemical demilitarization facilities exist at Johnston Island and Toelle, Utah. Chemical demilitarization facilities are under construction at Umatilla, Oregon; Anniston, Alabama; and Pine Bluff, Arkansas. The ATAP is responsible for the necessary activities to pilot test two neutralization-based processes for the disposal of distilled mustard agent and nerve agent VX stored at Aberdeen Proving Ground, Maryland, and Newport Chemical Depot, Indiana, respectively. The NSCMP mission is to provide centralized management and direction to the Department of Defense for the disposal of non-stockpile chemical materiel. Five primary mission areas of the NSCMP are disposal of binary chemical weapons, destruction of former production facilities, disposal of miscellaneous chemical warfare materiel, disposal of recovered chemical weapons, and identification and disposal of buried chemical weapons. CTR, funded through the Defense Threat Reduction Agency (Nunn-Lugar Appropriation), is responsible for assisting the Russian Federation in their chemical weapons destruction program. The two primary missions are establishing the first Chemical Weapons Destruction Facility in Russia and a Central Chemical Weapons Destruction Analytical Laboratory.

ACAT LEVEL Pre-MDAP *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Joint Tactical Radio System (JTRS)	PM, JTRS	*	USD(A&T)	Dr. Gansler

The JTRS program is establishing an industry developed and endorsed, open standard architecture that will permit the acquisition of a family of programmable, digital communications systems that are modular, scalable, and extendable. JTRS will be backwards compatible with legacy tactical radio systems and will provide a foundation for achieving joint interoperability. Because of the open standard, JTRS will be cost-effectively upgradeable via software to meet future requirements. The objective is to acquire JTRS systems as replacements for all of DoD's radio inventory and personal communications equipment. Acquisition will begin by 2002, with initial operational capability for several applications possible by 2003.

*This system is being developed in steps and cannot be placed in phases at the present time.

ORGANIZATION CG, SBCCOM *Total: 4*

ACAT LEVEL II *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Land Warrior Program	PM, Land Warrior	EMD	AAE	Mr. Hoeper

Land Warrior is a first generation, modular, infantry fighting system providing combat overmatch to Infantry soldiers. Land Warrior integrates night vision, information and communications technologies to improve the lethality, survivability, command and control, mobility, and sustainment of all infantry soldiers on the digitized battlefield. Land Warrior also has an associated Science and Technology effort called "Force XXI Land Warrior" to provide advanced components for technology insertion.

ACAT LEVEL IV *Total: 3*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Integrated Collective Protection System (ACIPS)	System Manager	PDRR	Acq Ex,	Mr. McKivrigan

The ACIPS is an advanced filtration system integrated with environmental control and exportable power source for vans and shelters to provide collective protection. It has the capability of being integrated in more than one configuration to provide protection to different tactical vehicles (heavy, XM31; medium, XM32; light, XM33).

Chemically Protected Deployable Medical Systems (CP DEPMEDS)	System Manager	EMD	DAR SBCCOM	COL(P) Mangual

The CP DEPMEDS is a kit that will be fielded with select DEPMEDS hospitals to convert the hospital into a fully operational environmentally controlled, collectively protected medical treatment facility. The CP DEPMEDS will provide a clean, toxic free environmentally controlled patient treatment area maximizing the use of existing equipment. The following components are required to be added to existing DEPMEDS hospitals to provide a fully operational collectively protected field hospital: M28 Collective Protection Equipment (CPE), CB ISO Shelter Seals, CB Protected Water Distribution System, CB Protected Latrines, Low Pressure Alarms and CB Protected Environmental Control Units (ECUs) and Heaters. CP DEPMEDS is a Multi-Service program with the Air Force and is fully supported by the OSD-CB Defense program. The system is scheduled for MSIII decision in 2QFY00.

M48 Chemical-Biological Apache Aviator's Mask/M49 Chemical-Biological General Aviator's Mask	System Manager	PFDOS	Acq Ex,	Mr. McKivrigan

CBDCOM (ERDEC) has tested and validated a man-mounted motor blower for use with the M48/M49 masks. The motor blower is lighter and has a better operating time than the M43/M43A1's motor blower. ERDEC is purchasing motor blowers, hoses, swivels, and straps to retrofit existing M43A1 facepieces to the M48 and M49 configuration. Apache aviator use the M48 mask while the general aviators (all helicopters except Apache) use the M49 mask. The mask provides protection against nuclear, Biological, and chemical agents.

ORGANIZATION CG, STRICOM *Total: 16*

ACAT LEVEL II *Total: 2*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Close Combat Tactical Trainer (CCTT)	PM, CATT	PFDOS	AAE	Mr. Hoeper

The CCTT program provides for the development and fielding of a networked system of interactive computer driven simulators, emulators, and semi-automated forces that replicate combat vehicles and weapon systems, combat support systems, combat service support systems, and command and control systems to create a fully integrated real-time collective task training environment. These trainers enhance realism and allow soldiers and units to learn tactical combat lessons in maneuver, command and control, and improved teamwork for increased survivability, combat effectiveness and warfighting skills.

Warfighters' Simulation (WARSIM) 2000	PM, WARSIM	EMD	AAE	Mr. Hoeper

WARSIM 2000 is the Army's next generation command and control constructive training simulation. It will support training for Commanders and Staffs from Battalion through Echelons-Above-Corps (EAC). It will replace the Army's current CBS, CSSTSS, and TACSIM systems and will be fielded Army-wide. WARSIM will also provide the Land Warfare functionality for the Joint Simulations System (JSIMS).

ACAT LEVEL III *Total: 14*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Aerial Targets	PM, ITTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The Aerial Targets program provides realistic surrogate or acquired threat high performance, multi-spectral aerial targets which fully stress the latest air defense and air-to-air weapon systems during Test & Evaluation (T&E). This program encompasses a family of rotary and fixed wing targets, full-scale, miniature and sub-scale targets, tactical ballistic targets, ancillary devices and remote control systems. Program also includes a suite of virtual models for selected aircraft types.

Air and Command Training System (ACTS)	PM, ACTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The ACTS program consists of various high fidelity system and non-system weapons simulators, combat mission simulators, Synthetic Flight Training Systems (SFTS), simulators, part-task and maintenance trainers, as well as force-on-force Tactical Engagement Systems (TES) which support training of Aviation, Air Defense, Intelligence and Electronic Warfare, Command and Control and Air Traffic Control in both virtual and live environments.

Army Threat Simulators	PM, ITTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The Threat Simulators program consists of hardware simulators and software simulations of threat weapons systems required for US Army testing and training. These systems provide a realistic opposing force environment for developmental and operational Test and Evaluation of Army tactical systems and meet selected Tri-Service requirements.

Aviation Combined Arms Tactical Trainer - Aviation Reconfigurable Manned Simulation (AVCATT-A) PM, CATT CG, STRICOM BG Bond

AVCATT-A is the second acquisition in the CATT family. It includes an expansion of the CCTT infrastructure (terrain, SAF, AAR, etc.) and addition of reconfigurable manned modules to support Aviation Collective training tasks. AVCATT-A supports Total Army training, with fielding to both the Active Army and Reserve/National Guard. AVCATT-A will be capable of both stand-alone Aviation focused training and linking with CCTT for robust Combined Arms training exercises. The addition of AVCATT-A to the CATT family greatly benefits the Army, allowing critical Air-Ground synchronization tasks to be trained and practiced.

C4I Simulations Systems (C4ISS) PM, C4ISS PDRR/EMD CG, STRICOM BG Bond

C4ISS program integrates specific activities of ground warfare (engagement and maneuver), Command Control Communications Computers and Intelligence (C4I), combat support and combat service support. One major component is OneSAF, a composable, next generation CGF that represents a full range of operations, systems and control processes from individual combatant and platform to battalion level. OneSAF provides a variable level of fidelity that supports all modeling and simulation (M&S) domains and employs appropriate representations of the physical environment and its effect on simulation activities and behaviors. A second major component, STOW-A, develops (within the Army) a capability to operate in a distributed, seamless, interactive environment between selected live, virtual and constructive simulations linked to Command Control Communications Computers Surveillance and Reconnaissance (C4ISR) systems.

Family of Simulations PM, WARSIM EMD/PFDOS CG, STRICOM BG Bond

The FAMSIM program consists of constructive simulation systems which provide man-in-the-loop command and control training for commanders and their staffs in a realistic, stress-filled environment for company/team through Echelons-Above-Corp levels. The program consists of the Corps Battle Simulation (CBS), Aggregate Level Simulation Protocol (ALSP), Brigade/Battalion Simulation (BBS) and Tactical Simulation (TACSIM).

Fire Support Combined Arms Tactical Trainer (FSCATT) PM, GCTS PFDOS CG, STRICOM BG Bond

The FSCATT is an integrated, individual and collective training system for the Field Artillery, consisting of a network of three training systems: a Howitzer Crew Trainer/weapon system strap-on devices, a Forward Observer trainer and a collective Training Control System. FSCATT exercises the FA gunnery team in realistic fire missions with a reduction in expenditure of ammunition and related operational costs.

Ground Combat Training Systems (GCTS) PM, GCTS PDRR/EMD/PFDO CG, STRICOM BG Bond

The GCTS program consists of high fidelity precision gunnery trainers, engagement skills trainers, small arms trainers, weapon appended training systems, part-task and maintenance trainers, as well as embedded training systems. These systems support Army's Armor, Infantry, Artillery, Air Defense and Engineer training requirements as well as training requirements for major weapon system platforms.

Ground Targets PM, ITTS PDRR/EMD/PFDO CG, STRICOM BG Bond

The Ground Targets program consists of surrogate and actual foreign vehicle targets as well as virtual target computer models of ground vehicle targets. These targets are required to support the Army's Test & Evaluation (T&E) of advanced weapon systems as well as support training worldwide during live fire exercises at home station, combat training centers and OCONUS theaters of operation.

Live Fire Training System (LTS) PM, LTS PDRR/EMD/PFDO CG, STRICOM BG Bond

The LTS program consists of systems required to support live force-on-force training, providing instrumentation/feed-back systems, battlefield effects, tactical engagement systems and opposing forces representations.

Major Instrumentation Program PM, ITTS PDRR/EMD CG, STRICOM BG Bond

This program is designed to develop and acquire major test technology and instrumentation to perform Test and Evaluation (T&E) of Army weapon systems. This program covers technologies and instrumentation for both technical and operational testing.

Mobile Automated Instrumentation Suites (MAIS)	PM, ITTS	EMD	CG, STRICOM	BG Bond

MAIS is a mobile Real Time Casualty Assessment (RTCA) instrumentation system that supports operational testing of current and future weapon systems through software control of the player's engagement parameters, real time mission control and data collection. The system consists of Player Units for instumenting weapons platforms and the Command, Control, Communication (C3) Center for pre-mission setup, control, and analysis. MAIS will interoperate with current electronic combat equipment and emerging weapon systems. It provides five categories of player instrumentation: fixed/rotary wing aircraft, tracked/wheeled vehicles (artillery, air defense and crew served weapons) and individual soldiers.

Multiple Integrated Laser Engagement System (MILES) 2000	PM, LTS	PFDOS	CG, STRICOM	BG Bond

MILES 2000 is a program to procure replacements for the basic MILES devices which provide tactical engagement simulation for direct fire, force-on-force training using eye-safe laser "bullets". The devices replicate the ranges, vulnerabilities, weapon characteristics and ammunition of the weapons being simulated. The devices are configured to cover a wide range of existing weapons and are capable of being readily adaptable to new weapons or modifications to existing weapons.

Synthetic Environments and Advanced Distributed Simulations (SEADS)	PM, SEADS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The SEADS program consists of multiple activities to support Synthetic Environment and SBA/SMART implementation. The Advanced Simulation Program (ASP) provides state-of-the-art technologies to facilitate experiments at the Core Distributed Interactive Simulation (DIS) Facilities (CDFs). The SEADS program also provides for services of the Combined Arms Assessment Network (CAAN), consisting of the Operational Support Facility (Orlando, FL), Land Warrior Test Bed (Ft. Benning GA), Mounted Warfare Test Bed (Ft. Knox KY) and Aviation Test Bed (Ft. Rucker AL), for conducting various experiments within a virtual environment.

ORGANIZATION DAR, SBCCOM *Total: 69*

ACAT LEVEL III *Total: 63*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
500 Foot Low Velocity Airdrop System (LVADS)	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

LVADS combines standard Airdrop components (Type V platform, parachutes, and associated hardware) augmented with technology enhancements, to achieve precision airdrop at low levels.

60K Low Velocity Airdrop System	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The 60k LVADS is comprised of a conventional parachute design and many improvements over existing low velocity airdrop components. It will allow deployment of equipment up to 60K lbs (total rigged weight) from an altitude of 2K ft at speeds of 130 to 150 knots. The system incorporates existing 42K lbs LVAD technology with new developments/improvements to accommodate the higher capacity.

Advanced Clothing Repair Equipment	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Advanced Clothing Repair program will develop and introduce updated capabilities to repair uniforms, shelters and associated items of equipment in the field. Commercial technologies such as heat sealing, ultrasonic welding and adhesive bonding will be integrated into this system. This system will then be provided as upgrades to existing fabric repair assets.

Advanced Food Sanitation	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Advanced Food Sanitation Center provides an enhanced capability to clean/sanitize food service equipment and a method to control kitchen grey water. This center reduces the number of required burners from three to one.

Advanced Tactical Parachute System	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Advanced Tactical Parachute System will replace the current military static line parachute, the T-10 and the T-10R reserve parachute, which was fielded in the 1950's. "Leap-ahead" technology will provide a system that meets the needs of the paratrooper well into the next century, reducing landing related injuries.

All Purpose Weapons and Equipment Container System	PM, Soldier	PFDOS	DAR SBCCOM	COL(P) Mangual

The system is a family of lightweight, multipurpose, weapons equipment containers for use by individual parachutists. The AIRPAC will consist of two containers which, when employed separately, together, or with the M-1950 weapons case, will provide parachutist's delivery of a wide variety of combat equipment, weapons and missile systems. Containers will have a single point release system which allows the container and leg tiedown straps to be released simultaneously. Current weapons/equipment containers and jump packs are too heavy and bulky and offer limited range of application use. PER W. STUDEBAKER, ZCS - DELETE THE PROGRAM

Ammunition Solar Cover	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Ammunition Solar Cover reduces solar loading on ammunition in field storage; is durable, easy to erect, transport and store; and is resistant to the deteriorating effects of the weather, climate and long term storage. The Type I covers an area 50 x 50 feet and the Type II covers 1/4 acre.

Automatic Building Machine (ABM)	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The ABM is a commercially available mobile factory that enables engineers to quickly construct metal buildings.

Automatic Chemical Agent Alarm (ACADA) M22	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The Automatic Chemical Agent Alarm/Non-Developmental Item (ACADA/NDI) is a man portable automatic alarm system capable of detecting blister and nerve agents. The ACADA/NDI operates with no human interference after system start-up, detects automatically for a minimum of 24 hours, provides audio and visual alarms, and has a communication interface to support battlefield automation systems. The ACADA/NDI meets the critical needs of the U.S. Forces for an automatic point sampling chemical agent alarm.

Aviation Maintenance Shelter	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The AMS will be a portable, lightweight temporary facility to support Army rotary-wing and fixed-wing aircraft maintenance in forward operational areas without fixed facilities. The AMS is needed by all aviation maintenance units and will be capable of sheltering the following aircraft: UH-60, CH-47D, AH-64, OH-58D, MH-60K, MH-47E, C-12, and RC-12 aircraft. The AMS will be used at Intermediate Staging Bases and at semi-fixed sites supporting a wide variety of contingency operations.

Ballistic Hardened Shelter	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

This effort will provide a HMMWV mounted shelter with inherent ballistic protection. Several programs, including THAAD and GBR have a requirement for increased survivability of personnel and mission equipment through increased ballistic protection. Modeling and Simulation will be used to analyze and develop a structural design that balances protection afforded and system weight. Techniques to be investigated and evaluated include external protective blankets, internal protective drapes, wall construction with kevlar, ceramic, or spectra material skin.

Ballistic Protective System	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Ballistic Protective System is a lightweight, modular system designed to provide ballistic protection to soldiers in vehicles and shelters as well as to static equipment such as ammunition stores.

Ballistic Protective System (BPS)	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

BPS provides fragmentation protection against indirect fire munitions for supplies and equipment. The BSP consists of modular interlocking panels which have an outer shell of camouflage patterned fabric that reduces threat identification. An inner layer of flexible, ballistic-resistant material provides protection from fragmentation. The panels include a V50 rating of 1500 feet per second velocity for 44-grain fragments and weigh approximately 1.2 lbs per square foot. One complete system includes sufficient panels to cover a fully loaded Palletized Loading System flatrack.

Camouflage Cover, Concealment and Detection Avoidance Shelter	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Camouflage, Concealment and Detection Avoidance Shelter is a 2 year streamlined R&D program that begins in FY00. It will develop a capability to provide rigid wall shelters a reduced signature with respect to visual, thermal, near IR, and radar detection without the use of external camouflage netting. This program will provide signature management as an inherent part of the shelter.

Cargo Bed Covers	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

Cargo Bed Covers are low-cost, lightweight, general purpose enclosures designed to protect mission equipment from the harmful effects of environmental

Chaplains Logistic Support Package	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The CLSP is needed to enhance the ability of Brigade and Battalion level Unit Ministry Teams' capability to carry ecclesiastical supplies, administrative supplies, and computer hardware in a consolidated package wherever they travel on the battlefield. The CLSP container will carry two packaged chaplain resupply kits, a notebook computer, assorted publications, forms and personal religious items required by the chaplain. The container will function as an altar/field desk.

Containerized Batch Laundry	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Containerized Batch Laundry (CBL) provides the capability to wash and dry 200 pounds of clothes per hour in a safe and clean environment. One CBL can replace two of the current Army M-85 trailer-mounted laundry systems. To conserve water, the system is equipped with water reuse capability capturing up to 30% of the water used. The CBL is currently in production for the Force Provider system.

Containerized Kitchen	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Containerized Kitchen consists of standardized kitchen components (including grill, cooking racks, field ovens) carried in an 8x8x20 ISO container mounted on a tactical trailer. It is a required element of the Army Field Feeding System-Future.

Containerized Self Service Laundry	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

This item allows soldiers to wash their personal clothing. Positioned at brigade support areas, it allows field service companies to move forward to service forward area troops. Consists of commercially available laundering equipment mounted in a standard ISO container.

Containerized Shower	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Containerized Shower provides safe, sanitary and modern shower facilities in mature theaters of operation.

Disperser, Riot Control Agent, Manually Carried: Mid-size, XM37	PM, Enhanced Soldier Systems	EMD	DAR SBCCOM	COL(P) Mangual

The XM37 Mid-Size Riot Control Disperser (MRCD) is a Soldier Enhancement Program (SEP). The program is designed to provide a lightweight riot control disperser by examining non-developmental items and resting their suitability for military use. Refill and Repressurization kits that will interface the MRCD with existing military compressors and riot control agent containers are also being developed under a separate SEP. This item is a new capability and will not replace an item already fielded.

EMI Hardened Non-Expandable Rigid Wall Shelter	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

This program will incorporate electromagnetic interference shielding into the Army Standard Family ISO Rigid Wall Shelters. It consists of fabric reinforced woven metal cloth and sliding retainer fastening devices, over hinged joints. The fabric reinforced woven metal cloth material will be permanently attached to the adjoining panel surfaces providing continuity with the capability to fold with the hinged panels. In latching panel areas, the same material will be used with the sliding retainer fastening devices to provide quick installation where permanent installation is impossible.

Enhanced Soldier Systems	PM, Enhanced Soldier Systems	*	DAR SBCCOM	COL(P) Mangual

Enhanced Soldier Systems is a compilation of ACAT III and IV products centrally managed the PMO. The products within this program consist of nearly every item that is worn, carried or consumed by the individual soldier. This includes uniforms, specialty clothing items, and chemical biological protective overgarments. Also included are individual equipment items such as sleeping bags, individual shelters and specialty items such as riot control equipment and protective body armor. There are three major components of the ESS program; Clothing and Individual Equipment, the Soldier Enhancement Program and Centrally Funded and Fielded items. There are approximately 110 items actively being developed or procured under the ESS program. In accordance with the concept of Total Life Cycle Management, the PMO is additionally responsible for approximately another 150 items that are either being developed in the Technical Base or have already been fielded.

* Systems managed under the Enhanced Soldier System are in all phases of development and production.

Extracted Parachute Jettison Device (EPJD)	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The EPJD allows for the jettisoning of malfunctioning extraction parachutes. The system employs a pyrotechnic release mechanism, which when fired, severs the extraction parachute from a load that has been hung up during airdrop operations. This allows the aircraft crew the ability to remotely disconnect the hung load from the parachute without risk of personal injury.

Family of Field Latrines	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Family of Field Latrines meets new operational requirements for latrine support across the entire spectrum of military operations. The Modular Initial Deployment Latrine is a readily available, portable and highly mobile latrine that accompanies the deploying personnel into a theater of operations. The Maturing Theater Latrine is a more stable, durable system available in the theater following initial deployment. The Follow On Latrine is a containerized system used in the mature theater in the rear area.

Family of Space Heaters	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

Provides safe, efficient heat for soldiers, supplies and equipment in tents and shelters. The current non-powered military tent heaters (M-1940's and 50's) represent safety hazards in the field, provide poor combustion of diesel fuel, low combustion efficiencies and poor heat distribution in tentage. The FOSH replaces the current military tent heaters, overcoming current deficiencies and safety hazards and satisfy requirements for new military tentage developments, sizes and materials.

Field Incinerator	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

Lightweight, easily maintainable and portable incinerator to be used during OOTW to reduce/eliminate the build-up of trash produced during normal/routine operations. A field service incinerator serves to provide a safe, economical and environmentally sound means of disposing of the trash produced during military operations during OOTW.

Food Sanitation Center	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The Food Sanitation Center provides a capability to clean/sanitize food service equipment.

Force Provider	PM, Force Provider	PFDOS	DAR SBCCOM	COL(P) Mangual

Force Provider is a containerized highly deployable "city" designed and engineered to provide climatic-controlled billeting, dining facilities, showers, latrines, laundry and morale, welfare and recreation facilities in modules for 550 soldiers. Force Provider missions provide rest and refit facilities for combat weary soldiers, theater reception, intermediate staging base redeployment and base camps for other military operations, such as humanitarian and disaster relief, and peacekeeping/enforcement missions. The Army objective is 36 modules and 12 cold weather kits for operations to -15 degrees F.

Generator Set, Smoke, Mechanical: Pulse jet, M157A2	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M157A2 modification program [MA4501] meets the needs of the U.S. Army to immediately satisfy the requirement for a safe, reliable, operationally effective mobile smoke generator system. It incorporates essential user requested safety and operational improvements such as a smaller control panel, improved fire detection equipment, fuel filter/water separator assembly, and a new engine head. These features combine to expand the operational capability from sea level to 8,000 feet. The modification kit program upgrades the basic M157 Smoke Generator Set to the M157A2 Multifuel Smoke Generator Set mounted on a motorized M1037/M1097 HMMWV or mechanized M1059A2/A3 prime mover.

Generator, Smoke, Mechanical: Motorized for dual purpose unit, M56	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M56, mounted on the High Mobility Multipurpose Wheeled Vehicles M1113 (HMMWV), disseminates smoke on the move and from stationary positions. It is designed to operate in support of light and airborne maneuver units to defeat enemy sensors and smart munitions such as tank thermal sights, guided munitions, direct energy weapons, and other systems operating in the visual through far-infrared regions of the electromagnetic spectrum. The system uses a turbine engine as a power source to disseminate large area obscurant clouds. The visual screening module is capable of vaporizing fog oil for up to 90 minutes and the infrared module is capable of disseminating a particulate material to provide 30 minutes of screening. A Driver's Vision Enhancer (DVE) modification program was initiated. A pre-planned product improvement (P3I) modificaiton program for next generation millimeter wave (MMW) obscuration will be capable of producing a 30 minute MMW screen.

Generator, Smoke, Mechanical: Mechanized smoke obscurant system, M58	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M58 Smoke Generator System is mounted on the M113A3 Armored Personnel Carrier (APC). It permits the same capability of smoke and obscurant protection as the M56, but adds it to the heavy maneuver units. A Driver's Vision Enhancer (DVE) and gas particulate filter unit (GPFU) are also included in this system for Chem/Bio protection. Beginning in FY99 program efforts were re-directed toward the selection of a vehicle chassis for the fielding of a tracked M58 system with sufficient capacity to include additional obscuration capability. A follow-on Modification program is programmed to incorporate the new MMW obscurant technology. The planned system will have mobility equal to the mechanized forces that it supports.

Grenade Launcher, Smoke: Screening, TA, XM90	PM, Smoke & Obscurants	EMD	DAR SBCCOM	COL(P) Mangual

The XM90 grenade is a soft launched, non-fragmenting, pyrotechnic smoke dispenser. The XM90 is constructed to include three individual dual-ported, core burning smoke canisters. The canisters are ignited and ejected by a charge of black powder contained in the grenade expulsion base. When fired as a salvo of 4 grenades from the LVOSS (XM7) discharger, the smoke grenades produce an effective obscuring cloud a minimum of 35 meters wide at a height of at least 2 meters at a distance of 35 meters from the vehicle. The cloud forms within 6 seconds and lasts a minimum of 20 seconds. The XM90 grenade is compatible with presently fielded 66mm smoke grenade launchers. The XM90 grenade will counter threat weapon systems operating in the visual and near infrared portions of the electromagnetic spectrum enhancing the survivability of the vehicle.

Improved Chemical Agent Monitor (ICAM)	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The ICAM is a hand held, soldier operated, post attack device for monitoring chemical agent contamination on personnel and equipment. It detects vapors of chemical agents by sensing molecular ions of specific mobility (time of flight) and uses timing and microprocessor techniques to reject interference's. The monitor detects and discriminates between vapors of nerve and mustard agents. The ICAM consists of a drift tube, signal processor, molecular sieve, membrane, and expendables such as batteries, confidence tester and dust filters. The monitor is 4" x 7" x 15", and weighs approximately 5 pounds.

Joint Service General Purpose Mask	PM, NBC	PDRR	DAR SBCCOM	COL(P) Mangual

The JSGPM is the replacement for the M40, M42, MCU-2/P. The JSGPM will significantly reduce mission degradation while being compatible with future equipment and soldier systems. The JSGPM will reduce weight and bulk and breathing resistance by as much as 50%. The JSGPM will also improve vision coupling, communication effectiveness, and comfort/wearability. The mask will significantly reduce total ownership cost/life cycle cost. The JSGPM will be virtually maintenance-free and may be of a low enough unit cost to be classified as disposable/replaceable after decontamination to a point.

Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD)	PM, NBC	EMD	DAR SBCCOM	COL(P) Mangual

The Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD) is a small, fully automatic agent vapor and aerosol detector. The unit is capable of on-the-move real-time operation from either aerial or surface platforms. The unit will detect agent cloud up to 5 kilometers and provide alarm for reconnaissance and non-reconnaissance (contamination avoidance) missions. The detector also provides chemical contamination information and data on means to avoid contamination. The JSLSCAD is equipped for visual and audible alarm, and can display the agent class and concentration levels. This information is available locally and or for transmission to battlefield information network. JSLSCAD also has the capability to indicate an all-clear condition.

Kitchen Company Level Field Feeding (KCLFF) - Enhanced	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The KCLFF Enhanced is used for field feeding of Company sized units and is designed to heat, deliver, and serve one heat and serve ration meal per day for up to 200 soldiers. KCLFF consists of various kitchen and food service hardware and is designed to be hauled by light wheeled vehicles.

Laundry Advanced System	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Laundry Advanced System is a laundry-processing and water recycling system which processes 400 pounds of laundry per hour and recycles about 97% of the water used in the laundry process.

Light Vehicle Obscuration Smoke System (LVOSS)	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The Light Vehicle Obscuration Smoke system (LVOSS) is a self-defense smoke/obscurant device externally mounted on light vehicles. It counters threat weapon systems operating in the visual and near-infrared portions of the electromagnetic spectrum. The LVOSS consists of the M7 Discharger, required mounting equipment, and a family of grenades. LVOSS installation kits contain an arming and firing unit (A/FU), wiring harness and brackets to mount the M7 Dischargers. The M304 installation kit is for the M966 Infantry TOW equipped HMMWV. The M305 and M310 installation kits mount the A/FU, four M7 Dischargers and the wiring harness to the Military Police M1025 and M1114 HMMWV, respectively. The LVOSS is especially designed to launch non-fragmenting grenades which are of low toxicity and environmentally safe. It can also be used to launch standard grenades. This program supports all current mission requirements for Army MP forces. No other procurement is currently planned. All LVOSS components are integrated as a complete system, operated from within the host vehicle using the A/FU. Host vehicles retain their combat load and operational capability in mobility, firepower and communications when configured with LVOSS.

Lightweight Maintenance Enclosure	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Lightweight Maintenance Enclosure is a highly mobile, quickly deployable shelter which allows maintenance to be performed across the battlefield under all environmental conditions. It accommodates tracked and wheeled vehicles, engineer, signal, armament and ground support equipment.

M6 Discharger	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M6 Discharger will provide the “Wolverine” Heavy Assault Bridge or other host vehicle with concealment from threat surveillance, target acquisition, and weapons guidance systems by projecting the 66mm family of smoke grenades. Each M6 Discharger consists of a four-grenade launch tube module that is designed for use on any vehicle platform. Each tube of the M6 Discharger can be separately fired on command. The system provides up to 360 degrees of coverage, overhead screening protection, and can interface with the Vehicle Integrated Defense System (VIDS) control. This current program fielding of the “Wolverine” Heavy Assault Bridge.

Mask, CML-BIO: Aircrew, M45	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The M45 Mask is being developed as the replacement for the M49 Mask. It will be usable by all Army helicopter crews except the AH-64 pilots. The mask consists of close-fitting eye lenses, front and side voice emitter for face-to-face and telephone communication, a microphone pass through for aircraft communication, a drink tube pass through for liquid nutrients, a low profile canister interoperability hose assembly to allow both hose and face mounted configurations, interchangeable nosecups, a rubber face piece with an in-turned peripheral seal and a second skin and hood. The mask will provide the required CB protection without the aid of forced ventilation air while maintaining compatibility with aircraft sighting systems and night vision devices. Injection molded composite materials will be used for the component parts to reduce weight and cost.

Mask, CML-BIO: M40A1/M42A2	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The M40A1/M42A2 masks provide respiratory, eye and face protection against chemical and biological agents. The masks consist of a silicone rubber face piece with an in-turned peripheral face seal and binocular rigid lens system. A face-mounted canister (gas and aerosol filter) can be worn on either the left or right cheek. For the M42A2 armored vehicle version, the canister is connected to the mask via a hose rather than being mask mounted. A microphone is included in the M42A2 armor crew mask. The masks come in small, medium and large sizes.

Mechanized Anchoring System	PM, Soldier Support	CE	DAR SBCCOM	COL(P) Mangual

The Mechanized Anchoring System will provide a quickly deployable and retrievable family of mechanized shelter anchors with worldwide capability. Anchors will range in capacity from the lower end which will replace wooden stakes to the upper end that will provide soft shelter complexes a fixed point capable of restraining multiple high wind lines. Additionally, a reliable, rugged installation and retrieval system will be provided.

Millimeter Wave (MMW)	PM, Smoke & Obscurants	EMD	DAR SBCCOM	COL(P) Mangual

Obscuration

The MMW program will develop an obscurant material which can be used in either an offensive or defensive mode against sensor systems such as radar and thermal homing sensors. Concepts to be investigated include an on-board cutting and dispensing system, as well as a pre-chopped material. The final system will be capable of being added onto both the M56 and M58 smoke generator Systems.

Mobile Kitchen Trailer-Improved	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Mobile Kitchen Trailer-Improved addresses the operational and functional deficiencies of the Mobile Kitchen Trailer including operation during cold weather conditions, exhaust of cooking by-products, cooking capacity, and interior lighting.

Modern Burner Unit (MBU)	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The MBU is a replacement for the unsafe Military Field Burner (M2). It will operate on JP-8 fuel, has immediate on/off capability and increased safety.

Modification, Reconnaissance System, NBC: M93A1 (FOX)	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The M93A1 FOX NBCRS is a dedicated system of NBC detection, warning and sampling equipment integrated into a high speed, high mobility, wheeled armored carrier capable of performing NBC reconnaissance on primary, secondary or cross country routes throughout the battlefield. The M93A1 has the capability to find and mark chemical and nuclear contamination. Through the secure communications system, it provides warnings to follow on forces. The crew is protected by the inclusion of an on-board overpressure system.

Modified Improved Reserve Parachute System (MIRPS)	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The MIRPS uses the existing 24-foot diameter reserve parachute with a new spring deployment activated device (DAD), a new pilot parachute, and a modified packtray. In appearance the MIRPS will resemble the current T-10R reserve parachute. However, the MIRPS incorporates a new reserve activation system where no action is required by the trooper after pulling the reserve handle.

Modular Command Post System	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The Modular Command Post System is highly mobile, lightweight, and easy to set up/strike. The number of tents that may be complexed together is limited only by terrain. It is used when tactical situations require high mobility and high frequency redeployment.

Modular General Purpose Tent System	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Modular General Purpose Tent System provides protection for personnel and equipment from debilitating effects of continuous exposure in climatic categories hot, basic, cold and severe cold. The MGPTS will be used to support operations across the operational continuum.

Modular Relocatable Buildings	PM, Soldier Support	CE	DAR SBCCOM	COL(P) Mangual

The Modular Relocatable Buildings will provide modular semi-permanent, securable structures. Current field fabricated solutions are labor intensive, expensive and unrecoverable.

Mortuary Affairs Remains Kit	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The MARK will provide a combat service support capability and/or augment current capabilities for the Mortuary Affairs Company. The MARK will consist of a Racking System, Conveyor System, and nestable transfer cases. The Racking System will be compatible with the next generation of refrigerated container systems. The Racking System and Conveyor System should be composed of lightweight, durable materiel and be able to be sanitized.

Multipurpose Integrated Chemical Agent Detector (MICAD) Alarm	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The MICAD is an NBC warning and reporting system that monitors NBC detectors, sensors and tactical communications equipment on board vehicles, vans and shelters. The MICAD digitizes new contamination information for use by contamination avoidance software such as the Automated NBC Information System (ANBCIS) both locally and remotely. The MICAD digital data and NBC alarms are sent and received on standard voice and digital tactical communications systems for both horizontal and vertical transmission on the battlefield.

Project Soldier	PM, Soldier	*	DAR SBCCOM	COL(P) Mangual

Project Soldier is responsible for a host of products worn, carried or consumed by the individual soldier. There are two subordinate product managers included in the PMO's responsibilities, Land Warrior and the Enhanced Soldier Systems. Separate descriptions and accounting information for these products are listed elsewhere independently within this document.

* Systems managed under the Project Soldier are in all phases of development and production.

Radiac Set AN/UDR-13, Pocket Radiac	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The AN/UDR-13 Pocket Radiac (PR) Set is a compact, handheld, tactical device capable of measuring the gamma dose-rate and gamma/neutron cumulative dose in a battlefield environment. Its pocket size permits convenient use by airborne, mounted, and ground forces. Presettable alarms are provided for both the dose-rate and total dose modes. A push-button pad enables mode selection and functional control. Data readout is by liquid crystal display (LCD).

Refrigerated Container Systems	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

Provides mission-critical refrigeration capability at forward areas for specialized military units. The Refrigerated Container System is used to transport perishable rations for field feeding units and human remains for hospital/mortuary affairs units.

Self-Powered Mutil Functional Water Heater	PM, Soldier Support	CE	DAR SBCCOM	COL(P) Mangual

The Self-Powered Multi-Functional Water Heater program will provide a portable, multi-functional water heater/power plant for providing forced hot water for field use in field sanitation and showers as well as laundry applications for units in remote locations. This equipment will replace the immersion heater that is inefficient and dangerous. This equipment will be lightweight, rugged, reliable and capable of producing its own power.

Small Unit Shower	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The Small Unit Shower will be a compact, lightweight field shower system to service small units, developed under the Soldier Enhancement Program.

Soldier Crew Tent (SCT)	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The SCT provides environmental protection for the billeting of small unit elements. It is a lightweight, durable, single frame, single hub tent.

TEMPER XXI	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

TEMPER XXI will replace/upgrade the current Tent, Extendable,Modular, Personnel (TEMPER) to provide improved mobility habitability, rapid erection and strike capability. Lightweight support structure and materials to improve mission performance will provide a tent that allows for multi-functional uses in all climatic conditions. This program will incorporate an airbeam frame for rapid deployment of large complexes for uses such as hospitals, and tent cities. The replacement tent will also utilize the modular deck system currently under development.

Universal Static Line	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Universal Static Line, when fully developed, will replace the need to have separate length static lines for each different airdrop aircraft. The line will either be one standard length, which successfully works with each aircraft, or an adjustable line that can be tailored to each aircraft.

Vehicle Engine Exhaust Smoke System (VEESS)	PM, Smoke & Obscurants	EMD	DAR SBCCOM	COL(P) Mangual

The Vehicle Engine Exhaust Smoke System (VEESS) kit consists of a lightly armored, exterior 15-gallon Fog-Oil-Tank that attaches using existing mounting bolts around the left signal light. It utilizes the existing VEESS pump to spray fog oil into the engine exhaust manifold. The fog oil recondenses upon contact with the atmosphere to produce a dense screen. The VEESS enhances unit survivability by screening movement, concealing positions and defeating enemy visual and near infrared target acquisition systems such as laser designators and laser range finders throughout the spectrum of warfare. This modification can be added without increasing overall vehicle gross weight if coupled with a substitution of M250 grenade discharger with the M6 grenade discharger.

ACAT LEVEL IV *Total: 6*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Binoculars, Mini M24	PM, Enhanced Soldier Systems	PFDOS	PM, Soldier	COL Jette

Light weight, miniature binocular capable of fitting in the cargo pocket of the BDU. In support of the soldier enhancement program.

Chemical/Biological Protected Shelter (CBPS)	PM, Soldier Support	PFDOS	Acq Ex,	Mr. McKivrigan

Highly mobile, CB protected shelter to provide a contamination-free, environmentally controlled working area for a battalion aid station singly, or, when joined with another CBPS, a division clearing station. It reduces set-up time, increases usable floor space, improves airlock operations and ventilation, and reduces reliance on prime movers.

Grenade, Hand: Incendiary, TH3, Directed, XM89	PM, Enhanced Soldier Systems	EMD	Acq Ex,	Mr. McKivrigan

The XM89 utilizes state-of-the art technology and material to provide a lighter/smaller package with an enhanced thermal effect and a significantly enhanced destructive capability compared to the current thermal grenade.

Modular Decontamination System (MDS) M21/M22	RDEC	PFDOS	Acq Ex,	Mr. McKivrigan

The MDS consists of one Decontaminant Pumper (DP) module, and two High Pressure Washer (HPW) modules. Each module may be transported on the high mobility trailer towed by an M56 Smoke System or a HMMWV. Chemical units with TO&E will be prfovided site material for detailed equipment decontamination and non chemical units with the capability for operational decontamination as described in FM 3-5. The MDS will be fielded to the dual purpose smoke/chemical companies replacing the M12A1 Skid Mounted Decon Apparatus and the M17 Lightweight Decon system. Non-chemical units may be provided with the M22 HPW for operational decontamination.

Sorbent Decontamination System (SDS)	RDEC	EMD	Acq Ex,	Mr. McKivrigan

The SDS will consist of a decontaminant superior to XE555 used in the M295 kit to remove chemical agents from military equipment. The new absorbent will reduce off-gassing and contact hazard associated with the absorbent. It will be used by the soldier to decon personal equipment, vehicles and weapons..

Tester, Leakage, Protective Mask: Protection Assessment Test System, M41	RDEC	PFDOS	Acq Ex,	Mr. McKivrigan

The M41 Protection Assessment Test System (PATS) is designed to check the fit and readiness of protective masks. The PATS is approximately 200 cubic inches in size and 4 lb. in weight. It is based on a miniature Condensation Nucleus Counter that continuously samples and counts individual particles that occur naturally in the surrounding air. The PATS measures the concentration of these particles inside and outside of the mask and calculates a Fit Factor.

ORGANIZATION DSA, AMCOM *Total: 45*

ACAT LEVEL IC *Total: 2*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
BLACK HAWK (UH-60) Utility Helicopter	PM, Utility Helicopter	PFDOS	AAE	Mr. Hoeper

The Black Hawk (UH-60) is a utility, tactical, transport helicopter. It is the primary helicopter for air assault, general support, and aeromedical evacuation units. Modified Black Hawks also fulfill command and control, electronic warfare, and special operations roles. An 11-man, fully equipped infantry squad can be carried in one Black Hawk. The Black Hawk also is the first utility and assault helicopter that adds to the Army's Division-level mobility; for example, it can reposition a 105 mm howitzer, its crew of six, and up to 30 rounds of ammunition in a single lift. The aircraft's critical components and systems are armored or redundant to enable it to withstand multiple small arms hits, and its airframe is designed to progressively crush on impact to protect the crew and passengers in a crash. Ease of maintenance in the field was designed into the Black Hawk from the beginning. The Army began fielding the UH-60 in 1978. Between 1978 and 1989 the Army procured UH-60A model aircraft. In October 1989, the power train system was upgraded, resulting in a model designation change from UH-60A to UH-60L. The Army continues to procure Black Hawks under a multi-year, multi-service contract. Current procurement objective is 1763. The Army plans to initiate (FY02) a Service Life Extension Program (SLEP) to convert the aging UH-60A models to the UH-60L+ configuration to support Army XXI requirements. The Army plans to convert UH-60A model aeromedical evacuation helicopters to the UH-60Q configuration with enhanced capabilities to meet this mission. This program will be initiated with the SLEP in FY02 to provide mutual leveraging and cost savings.

Kiowa Warrior (OH-58D)	PM, Scout/Attack Helicopter	PFDOS	AAE	Mr. Hoeper

The Kiowa Warrior is the armed reconnaissance helicopter for the Army. The Kiowa Warrior will start to be displaced by the Comanche, but will be in the active Army until 2022. The OH-58D performs reconnaissance, security, command and control, target acquisition/ designation, and defensive air combat missions. The Kiowa Warrior adds armed reconnaissance and light attack to the basic OH-58D Kiowa mission capabilities. The OH-58D has a Mast-Mounted Sight that houses a Thermal-Imaging System, Low-Light Television, and a Laser Rangefinder/Designator. A highly accurate navigation system permits precise target location that can be handed off to other engagement systems via the Airborne Target Handover System. The Laser Designator can provide autonomous designation for the laser HELLFIRE or remote designation for other laser-guided precision weapons. Air-to-Air Stinger (ATAS) provides security against threat aircraft. The armed retrofit program began in FY91 and provides Air-to-Ground weapons and other improvements to previously produced OH-58Ds. The OH-58D is in the 14th year of production. AHIPs began retrofit/remanufacture in FY93 for the Armed Kiowa Warrior version. Aircraft deployments include the training bases, and operational units worldwide. The Safety Enhancement Program (SEP) began in 1997 and seeks to update the entire Kiowa Warrior fleet with improved engines, crashworthy seats, cockpit airbags, and a digitized Mission Equipment Package.

* Removed as a ACAT IC per the 18 Nov 98 OSD ACAT listing. Change in ACAT level is being staffed.

ACAT LEVEL III *Total: 27*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
AH-1 COBRA	PM, Scout/Attack Helicopter	PFDOS	DSA, AMCOM	BG(P) Armbruster

The AH-1 is an armed attack, single-engine, tandem seated helicopter with a maximum gross weight of 10, 000 pounds and a T53L703 1600 SHP engine. The armament system consists of the M65 TOW Missile System, 20 mm gun, and Hydra-70 rockets.

Air Traffic Nav Integration and Coordination System(ATNAVICS), Fixed Base Precision Approach Radar	PM, ATC	EMD	DSA, AMCOM	BG(P) Armbruster

The ATNAVICS is a tactical precision approach radar system that will provide the capability to conduct area surveillance and precision approach control for aircraft departures and arrivals in all weather conditions on a 24-hour basis. The ATNAVICS will replace the AN/TSQ-71, Landing Control Central.

AN/FPN-66 Radar	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

A non-tactical air traffic control system that provides an electronic surveillance capability in the approach and terminal area at Army airfields by providing for the separation of air traffic (IFR & VFR) by tower and radar controllers. In two cases it is used to enhance range control operations. It is a single channel analog and dual channel digital secondary radar.

Base Shop Test Facility	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Base Shop Test Facility (BSTF) is a member of the Integrated Family of Test Equipment (IFTE) and provides general purpose automatic electronic testing capability at the direct and general support levels of maintenance. The BSTF in the field is self-contained, consisting of the tester and associated test program sets mounted in two S-280 shelters, on two five-ton trucks, powered by two 60kW generators. The IFTE was designated a DOD standard family of testers in Apr 94.

C23 Fixed Wing Aircraft	PM, Fixed Wing Aircraft	PFDOS	DSA, AMCOM	BG(P) Armbruster

Twin turbo prop, high wing, cargo aircraft. Capable of operations from unimproved runways. Equipped for paradrop, medevac, cargo missions with rear ramp.

Calibration Sets Equipment	PM, TMDE	EMD/PFDOS	DSA, AMCOM	BG(P) Armbruster

The Calibration Sets Equipment program provides calibration standards, auxiliary equipment, accessories, and repair equipment required for the Army's test, measurement, and diagnostic equipment (TMDE) calibration and repair program. This equipment is used by direct support/general support maintenance units to verify accuracy of TMDE and ensure legal traceability to standards established and maintained by the U.S. National Institute of Standards and Technology.

Communications Console System (CCS)	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

A communication system switching device for low to medium density air traffic control sites. Targeted sites include locations lacking adequate communications capability or those locations using obsolete AN/FSW-8 communications consoles. This system augments the National Airspace System.

Digital BRITE Radar Indicator Tower Equipment (DBRITE)	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

A BRITE-TV type display to ensure flight safety and proper spacing. It is capable of providing the tower controller with positive identification, location, altitude and speed of aircraft within the tower and GCA/FF control zones.

Electronic Repair Shelter	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Electronic Repair Shelter (ERS) provides a capability for field level repair of circuit card assemblies in line replaceable units and shop replaceable units. It consists of a circuit card tester and two or more electronic repair work-stations, all packaged in an environmentally-controlled shelter. The ERS will be fielded to general support maintenance units at corps level and above, and it will reduce operating and support costs by avoiding the need for evacuation of faulty components to depots or contractors' plants for repair.

Enhanced Terminal Voice Switch (ETVS)	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

Performs all control and switching functions needed for ATC voice communications. This includes air to ground to air communications with pilots as well as inter/intra facility voice communications. The switch will meet the needs of both ATC tower and terminal approach control facilities. The ETVS will be modular and customized to fit individual facility requirements.

Fixed Base Precision Approach Radar (FBPAR)	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

The FBPAR is a non-tactical precision approach radar system that will provide the capability to conduct area surveillance and precision approach control for aircraft departures and arrivals in all weather conditions on a 24-hour basis. The FBPAR will replace the AN/FPN-40/FSQ-84 Ground Controlled Approach Radar/Air Traffic Control Radar Beacon System.

Fixed Wing Aircraft Upgrades	PM, Fixed Wing Aircraft	PDRR	DSA, AMCOM	BG(P) Armbruster

Various avionics upgrades to make aircraft compatible w/ future international nav. requirements, improve aircraft pilotage, and increase aircraft life.

Integrated Family of Test Equipment (IFTE)	PM, TMDE	EMD/PFDOS	DSA, AMCOM	BG(P) Armbruster

The Integrated Family of Test Equipment (IFTE) program provides automatic test equipment which is configurable to support multiple weapon systems. It consists of the Base Shop Test Facility, the Contact Test Set (CTS) and follow-on CTS(Soldier Portable On-System Repair Tool), and the Electro-Optics Test Facility. The IFTE systems are used at unit and direct support/general support levels, both on and off system, to fault isolate, test, and repair line replaceable units and printed circuit boards. Based on recommendations of a Joint Service Automatic Test Systems Investment Strategy Group, IFTE was designated as a Department of Defense standard family of testers in Apr 94.

Light Observation Helicopter	PM, Scout/Attack Helicopter	PFDOS	DSA, AMCOM	BG(P) Armbruster

The OH-58A and OH-58C helicopters are low silhouette, single rotor helicopters powered by a single gas turbine, T63-A-700/720, engine. The helicopter is used for observation, scout, and command and control. This is a single pilot aircraft with the capability to carry three passengers or cargo. The OH-58C is an upgraded OH-58A with more powerful engine and transmission and an upgraded navigation and instrumentation capability.

Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW)	PM, MPIM/SRAW	EMD	DSA, AMCOM	BG(P) Armbruster

The MPIM/SRAW is a one-man light weight, shoulder fired, fire and forget, multiple purpose munition capable of defeating enemy forces in buildings, reinforced structures, bunkers and future light weight armored vehicles. The MPIM/SRAW consists of a disposable launcher/carry case equipped with a 2.5X telescopic sight that is compatible with current and future night vision devices. The shoulder launched missile consists of a two state, soft launch propulsion system with inertial guidance and an explosively formed penetrator with follow-through grenade warhead. The missile is capable of being fired quickly from its carrying configuration and safely fired from enclosures. Joint effort with USMC.

National Airspace System (NAS)	PM, ATC	EMD/PFDOS	DSA, AMCOM	BG(P) Armbruster

The NAS integration program provides engineering and automation necessary for Army ATC facilities to interface with FAA and sister DOD ATC facilities while controlling aircraft in the National Airspace System. The following systems comprise the NAS program: Digital Airport Surveillance Radar (DASR), Military Airspace Management System (MAMS), Digitized AN/FPN-666 Surveillance Radar System, Video Information Distribution System (VIDS), Uninterrupted Power Supply (UPS), and the Voice/Switch Programs.

New Training Helicopter (NTH)	PM, Kiowa	PFDOS	CG, AMCOM	MG Sullivan

The Army's NTH (TH-67) is a Bell 206. Its function is to replace existing Hueys being used for training Initial Entry Rotary Wing students. The TH-67 (Creek) will require approximately one-third the operating and support cost of the Huey.

RC-12/C-12	PM, Fixed Wing Aircraft	PDRR	DSA, TACOM	COL(P)

Various avionics upgrades to make the aircraft compatible with future international navigation requirements, improve aircraft pilotage, and increase aircraft life.

Robotic Combat Support System	PM, JPO UGV/S	CE	DSA, AMCOM	BG(P) Armbruster

The Robotic Combat Support System (RCSS) is a light, robotic, soldier-controlled vehicle system used to support several missions by attaching and removing attachments. Capabilities include: compactor, picket driving, anti-personnel mine and booby-trap proofing flail kit. The RCSS will have a medium and light version.

Standardized Robotic System	PM, JPO UGV/S	EMD	DSA, AMCOM	BG(P) Armbruster

The Standardized Robotic System (SRS) kit will be installed on existing military vehicles and will be transparent to the operator. When operated remotely, all driving and payload functions are controlled from a remote location. This insertion of new technology on existing systems allows engineer units to operate heavy machinery or other military vehicles in extremely hazardous environments.

Stinger Block I	PM, SHORAD	PFDOS	DSA, AMCOM	BG(P) Armbruster

Low altitude Forward Air Defense for maneuver forces against low flying fixed, UAV, cruise missile and rotary wing targets with manportable and

Tactical Airspace Integration System (TAIS)	PM, ATC	EMD	DSA, AMCOM	BG(P) Armbruster

The TAIS is a tactical command and control system that will provide automated Army Airspace Command and Control (A2C2), improved air traffic services, airspace management services during military operations other than war (OOTW), effective battlespace synchronization and interface with air traffic services facilities of other services and other nations. The TAIS will replace the AN/TSQ-61B, Flight Control Central.

Tactical Terminal Control System (TTCS)	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

The TTCS is a mobile communications system that will provide Air Traffic Services (ATS) at remote landing sites, drop zones, pick-up zones and temporary helicopter operating areas. TTCS equipped units will provide ATS for aviation assets conducting operations across the entire battlefield. The TTCS will replace the AN/TSQ-97A.

Tactical Unmanned Vehicle (TUV)	PM, JPO UGV/S	PDRR	DSA, AMCOM	BG(P) Armbruster

The TUV is a tele-operated, state-of-the-art system enabling small units to perform remote day/night reconnaissance, surveillance, target acquisition (RSTA) and biological/chemical (BC) detection missions from protected positions. The TUV consists of a Remotely Controlled Multi-Mission Platform (RCMMP), Operator Control Unit (OCU), Mission Modules (MM), and Mission Planner (MP). The RCMMP is tele-operated forward and transports the Mission Module. The soldiers/Marines at the OCU, remaining in covered positions, will deploy the RCMMP up to 10 Km forward of friendly forces. A data link between the OCU and RCMMP allows vehicle control and the transmission of critical RSTA and BC detection information back to the operator. The TUV will support expansion of the Battalion Commander's battle space as an organic system to gather real-time battlefield information. The TUV program's Evolutionary Acquisition Strategy, along with modular design, will facilitate the horizontal technology insertion of the future mission payload packages necessary to satisfy twenty-first century requirements. TUV will be an organic battalion asset for Army and Marine Corps Infantry and Marine Corps Artillery units and will be compatible with present and future Army and Marine Corps Command, Control, Communications, Computer, and Information Systems.

Test Equipment Modernization	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Test Equipment Modernization (TEMOD) program provides state-of-the-art general purpose test, measure-ment, and diagnostic equipment (TMDE) to meet the needs of the Army's direct and general support maintenance units. The program was initiated in 1981 to reduce TMDE proliferation and obsolescence and to reduce TMDE support costs. The TEMOD program procures commercial or nondevelopmental items through streamlined acquisition procedures to support a wide variety of Army weapons and support systems. The near-term focus of the program is on procurement of multifunctional devices and advanced technology systems which will further reduce test equipment inventories and the associated operating and support costs.

UC-35 Fixed Wing Aircraft	PM, Fixed Wing Aircraft	PFDOS	DSA, AMCOM	BG(P) Armbruster

High speed medium range fixed wing aircraft for hauling passengers and limited quantities of supplies.

Vehicle Teleoperation Capability	PM, JPO UGV/S	PDRR/EMD	CG, AMCOM	MG Sullivan

Standardized Teleoperation System (STS) with platform unique actuators and software.

ACAT LEVEL IV *Total: 16*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Automated Integrated Survey Instrument (AISI)	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

An electronic total station survey instrument which provides the surveyor with a single instrument to achieve all functions formally carried out with theodolites, tapes, and distance measuring devices.

AVENGER Weapon System	PM, SHORAD	PFDOS	DSA, AMCOM	BG(P) Armbruster

AVENGER is the Line-of-Sight-Rear component of the Forward Area Air Defense program.

Aviation Ground Power Unit (AGPU)	WSM AGSE	PFDOS	DSA, AMCOM	BG(P) Armbruster

Self-propelled, turbine powered cart which provides hydraulic, AC/DC power, and pneumatic power for UH-60, OH-58D, CH-47, and AH-64 aircraft.

CHAPARRAL Guided Missile System	WSM Hawk	PFDOS	DSA, AMCOM	BG(P) Armbruster

CHAPARRAL Guided Missile System is a standard short-range, low altitude, forward area, air defense system.

Dragon	WSM Hawk	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Dragon System is a medium range anti-armor/bunker missile system.

HAWK Guided Missile System	WSM Hawk	PFDOS	DSA, AMCOM	BG(P) Armbruster

HAWK is a medium-range, surface-to-air guided missile system that provides air defense coverage against low-to-medium altitude aircraft. It is a mobile, all weather, day and night system.

Laser Target Designators (LTD)	WSM Lasers/Armored Vehicles	PFDOS	DSA, AMCOM	BG(P) Armbruster

LASERS consist of three distinctive models: Laser Target Designator, Modular Universal Laser Equipment, and Ground/Vehicular Laser Locator Designator. All three provide the Army, USMC, and allies with the ability to perform precision strikes via accurate location designation of hostile forces. The M981, FISTV enhances combined arms efficiency by providing the Fire Support Team and the Combat Observation Lasing Team headquarters with an operating base for targeting, self-location, and designation equipment which provides improvements in first round accuracy, mobility, and survivability comparable with the maneuver units being supported.

Light and Special Division Interim Sensor (LSDIS)	WSM LISDIS	PFDOS	DSA, AMCOM	BG(P) Armbruster

LSDIS is a lightweight, ruggedized, highly transportable sensor system.

Man Portable Common Thermal Night Sights	WSM Thermal Viewers	PFDOS	DSA, AMCOM	BG(P) Armbruster

Man Portable Common Thermal Night Sights (MPCTNS) is a family of missile systems-mounted and separately employed thermal night sight systems.

Missile Minder System AN/TSQ-73	WSM AN/TSQ-73	PFDOS	DSA, AMCOM	BG(P) Armbruster

The AN/TSQ-73 is an all-microelectronic surface-to-air missile fire distribution system providing command and control.

New Aviation Tool System 95 (NATS-95)	WSM AGSE	PFDOS	DSA, AMCOM	BG(P) Armbruster

An improved tool system featuring enhanced inventory and quality tools.

Non-Destructive Test Equipment (NDTE)	WSM AGSE	PFDOS	DSA, AMCOM	BG(P) Armbruster

Consists of four Air Force managed systems: X-ray, Harmonic Bond Tester, Ultrasound Tester, and Eddy Current Tester. These units support all Army rotary wing aircraft.

Shop Equipment Contact Maintenance (SECM)	WSM AGSE	PDRR	CG, AMCOM	MG Sullivan

High Mobility, Multipurpose, Wheeled Vehicle (HMMWV) Heavy Variant (HHV) with an enclosure on back used to transport personnel, repair parts, and tools to forward battlefield locations to repair disabled aircraft.

Standard Aircraft Towing System (SATS)	WSM AGSE	PDRR	DSA, AMCOM	BG(P) Armbruster

Will provide a standard vehicle to safely tow all Army aircraft.

TOW Guided Missile System - Ground Launcher	WSM Missiles	PFDOS	DSA, AMCOM	BG(P) Armbruster

The TOW2 weapon system is a crew portable, heavy antitank weapon system designed to defeat armored vehicles and other targets such as field

Unit Maintenance Aerial Recovery Kit (UMARK)	WSM AGSE	PDRR	DSA, AMCOM	BG(P) Armbruster

Provides all sling, rigging, spreader bars, and hardware needed to enable aerial recovery of any Army aircraft.

ORGANIZATION DSA, TACOM *Total: 191*

ACAT LEVEL II *Total: 3*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
M109A6 Paladin	PM, Paladin/FAASV	PFDOS	CG, TACOM	MG Caldwell

The M109A6 applies a series of modifications to the current M109A2/A3 Howitzer. It is a self-propelled, fully tracked, diesel powered, aluminum armored, turreted, air transportable weapon system able to carry a minimum of 37 complete, conventional rounds and two oversized projectiles on-board. Its main armament consists of a modified version of the M185 cannon assembly (M284) and M178 gun mount (M182A1). The cannon, propelling charge, and projectile mix permit unassisted ranges of at least 22 km and a maximum assisted range of 30 km. A new turret structure facilitates integration of the various turret improvements and Vulnerability Reduction Measures (VRM's), and improves overall crew compartment layout and space.

Palletized Load System	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The Palletized Load System (PLS) consists of a 16.5-ton payload prime mover (10x10) with an integral load-handling system, which provides self-loading and unloading capability; a 16.5-ton payload trailer; and demountable cargo beds, or flatracks. The PLS performs line haul, local haul, unit resupply, and other missions in the tactical environment to support modern and highly mobile combat units. The PLS truck is equipped with a central tire inflation system (CTIS), which significantly improves off-road mobility. An intermodal flatrack with enhanced transportability, stacking and deployability has been in production since FY95. The Containerized Roll-in/Out Platform (CROP), an A-Frame flatrack which fits inside a 20-foot International Standards for Organization (ISO) Container, was acquired in FY97. The PLS is a primary component of the Maneuver Oriented Ammunition Distribution System (MOADS) in support of field artillery. The PLS will allow interoperability with the comparable British, German and French systems, through the use of a common flatrack. A flatrack-to-truck ratio of 10:1, in theater, has been determined to be the minimum requirement to support MOADS. A container handling unit (CHU) will be fielded to transport 20-foot ISO containers without the use of a flatrack.

Wide Area Mine (WAM)	PM, MCD	EMD	DSA, TACOM	COL(P)

WAM is the Army's first generation of a smart, autonomous, top attack munition which will defeat various targets including tanks and both tracked and wheeled vehicles (mobility kill). The initial version includes various sensors (seismic and acoustic) to detect, classify and track a target. Once the target is validated by the internal control electronics and within the 100 meter lethal radius, the mine determines the optimum firing time. The upper portion of the ground platform tilts and fires a munition over the target. The target is acquired by the infrared sensor and a tantalum explosively formed penetrator is fired at the target. The initial version, identified as BASIC WAM, is hand emplaced and can be manually set or remotely set by a one way radio. The follow-on BLOCK I pre-planned product improvement WAM, C2 WAM, will have an advanced two way command and control capability (on-off-on), compound warhead and other sensor and ground platform advancements. The BLOCK I will be hand emplaced. Follow-on efforts planned for WAM in the next century will feature alternative delivery means for deep attack.

ACAT LEVEL III *Total: 167*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
12 Gauge Breaching Round	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a 12 Gauge breaching cartridge that will defeat door lock mechanisms, hinges and padlocks on wooden doors. Supports the Soldier Enhancement

12 Gauge Non-Lethal Point and Crowd Control	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a 12 gauge non-lethal shotgun cartridge for crowd control purposes. Two rounds will be Type Classified, one for use against multiple personnel in a crowd, the other for use against one individual. This program is in support of the Soldier Enhancement Program.

1500 GPH Reverse Osmosis Water Purification Unit	PM, TAWS	EMD	DSA, TACOM	COL(P)

A future generation large scale ROWPU which is scheduled to replace the 600 GPH ROWPU. This system will be more efficient and easier to maintain.

3000 GPH Reverse Osmosis Water Purification Unit (3K ROWPU)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 3K ROWPU is self-contained, mounted onto a M871A1 trailer, and powered by a 60KW generator. In the theater of operations it is towed to an operating site by a M818 or M932 5-ton tractor. It has the capacity to produce potable water from any water source and to remove many chemical and biological contaminants.

350 GPM POL Unregulated Pump	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 350 GPM Pump is a component of the Fuel System Supply Point and the inland Petroleum Distribution System. It supports the Army's primary means of distributing and issuing petroleum to combat forces under tactical conditions.

40 MM Canister Round for MK19	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a 40mm Cartridge for the MK19 Grenade Machine-gun for anti-personnel capability out to 100 meters. This program is in support of the Soldier Enhancement Program.

40mm Non-Lethal Crowd Dispersal Cartridge	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides friendly forces with a direct fire, non-shrapnel producing round with effective range of 15-30 meters and fired out of a 40mm Grenade Launcher. Program transitions to PM SA 3Q99.

5.56mm Armor Piercing Round, M955	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

An NDI armor piercing round with improved penetration capabilities over the M855 cartridge. Used in the M16A2 rifle, M4 Carbine and the M249 Machine Gun. This program is in support of the Soldier Enhancement Program.

Adjustable Sight Bracket for	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a common mounting interface for MK 19 Grenade Machinegun fire control devices. It adjusts to maintain line of sight to target while weapon is elevated, reducing target acquisition time.

Advance Aviation Forward Area Refueling System (AAFARS)	PM, PAWS	EMD	DSA, TACOM	COL(P)

A lightweight modular refueling system capable of refueling four aircraft simultaneously, at a minimum flow rate of 55 GPM per nozzle.

Airborne Stand-off Minefield Detection System	PM, MCD	PDRR	DSA, TACOM	COL(P)

Remote (UAV payload) system capable of detecting patterned/scatterable surface laid minefields and buried patterned minefields. It uses artificial intelligence to analyze data and transmit it to maneuver commands in near real time.

All-Terrain Crane (ATC)	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The ATC is pneumatic tired, diesel engine driven, with fully revolving superstructure and cab, and hydraulically powered telescoping boom. It will be used to perform lifting, lowering, loading, and excavation; handling general supplies, construction materials and bridging; to support maintenance, collection and classification points, rehabilitation of maintenance and communication routes, resupply points and logistic support facilities. The ATC will replace overage 20 and 25 ton cranes (rough terrain and truck mounted) in the Army inventory.

All-Terrain Lifter Army System (ATLAS)	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The ATLAS is a rough terrain forklift which has the same mobility and speed as the 6,000 lb (6K) variable reach rough terrain forklift and can perform the functions required of the current Army standard 10,000 lb (10K) rough terrain forklifts.

Anti Reflection Devices	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides the capability to reduce the visible signature from glare/glint of fielded and future direct view optics, e.g., M144 Straight Telescope, M22 Binoculars, M24 Sniper Day Scope, AN/PVS-10 Sniper Day Night Sight, M24 Miniature Binoculars. This program is in support of the Soldier Enhancement Program.

Anti-Personnel Obstacle Breaching System (APOBS)	PM, MCD	EMD	DSA, TACOM	COL(P)

The APOBS is a Rocket propelled/45M line charge with 108 fragmentation grenades. It is a two man portable replacement for the Bangalore Torpedo (less than 1/4 the weight).

Armored Security Vehicle	PM, LTV	PFDOS	DSA, TACOM	COL(P)

The Armored Security Vehicle (ASV) is a turreted, lightly armored all-wheel drive vehicle that provides ballistic protection, overhead protection and protection against landmines. The ASV accepts the MK-19 Grenade Machine Gun, the M-2 .50 caliber machine gun and the M249 5.56mm Squad Automatic Weapon (SAW) machine gun. The ASV will be transportable by C-130 and larger aircraft, rail and marine modes. The ASV will be capable of carrying four persons. The vehicle will have a diesel engine, automatic transmission, central tire inflation system and a payload of 3,360 pounds.

Aviation Fuel Testing Kit	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The Aviation Fuel Testing Kit is a self-contained, portable test kit used to test aviation fuels to ensure that only dry, uncontaminated fuels are used.

Binoculars, Stabilized XM25	PM, Small Arms	EMD	DSA, TACOM	COL(P)

This program will provide a high power stabilized binocular for use as a surveillance and battle damage assessment device. This program in support of the Soldier Enhancement Program.

Boresights for Aimpoint and Thermal Systems (BATS)	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a small arms dry zeroing/boresighting device for thermal. infrared laser pointer and close combat optics-weapon configurations. It is desired to maximize commonality with existing M30 components.

Canister-Launched Area Denial System (CLADS)	PM, MCD	PDRR	DSA, TACOM	COL(P)

Deploys a variety of non-lethal payloads from a Volcano canister to create rapidly emplaced non-lethal barriers. Uses Volcano Dispenser half rack on a

Carbine, M4	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

The M4 Carbine is a smaller, lighter version of the M16A2 rifle. It is a 5.56mm, gas operated, air-cooled, magazine-fed, selective rate shoulder fired weapon. It is fed by a 30 round aluminum magazine and is designed for use in close quarters. It is the fleet replacement weapon for the .45 caliber M3 submachine gun and selected M9 and M16 series weapons.

Close Combat Optics, M68	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

An optic sight which enhances the combat effectiveness of the M16A2 Rifle and M4 Carbine. The sight allows the soldier to fire the weapon with both eyes open. A Soldier Enhancement Program supporting the Land Warrior Program.

Common Bridge Transporter (CBT)	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The Common Bridge Transporter (CBT) consists of a combination of a ribbon bridge launcher and retrieval mechanism Load Handling System (LHS) mounted on a Heavy Expanded Mobility Tactical Truck (HEMTT) chassis. The system consists of the transporter, Bridge Adapter Pallets (BAPs) and Boat Cradles. The transporter shall have the capability of transporting, launching and retrieving the fielded ribbon bridge interior bay, ramp bay, bridge erection boat, and bridge adapter pallet. The CBT shall also load/ unload and transport the Palletized Load System (PLS) NATO standard flatracks.

Compactor Hi-Speed Tamp, Self-Propelled	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This is a reprocurement of a Non-Developmental Item (NDI) to fill existing shortages and replace over-aged equipment in construction support units. The compactors will be self-propelled, diesel powered, tamping machines for high speed embankment compaction.

Construction Equipment Service Life Extension Program (SLEP)	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

This Army provides SLEP for Construction Equipment (CE). This SLEP program is expected to extend the life of CE equipment by approximately 10-15 years thus saving on overall new procurement.

Crane, Shovel Crawler	PM, CE/MME	EMD	DSA, TACOM	COL(P)

The 40 Ton Crawler Crane is a piece of commercial construction equipment that, when combined with various attachments, is capable of performing a selected number of tasks in support of horizontal and vertical construction, quarry and asphalt operations, and off-shore and pier facilities in the areas of maintenance and construction by engineer port construction companies. Typical tasks are construction, repair and maintenance of forward area landing strips, heliports, logistical support facilities, port facilities, roads and bridges. The basic crane-shovel consists of a fully revolving (360 degree) superstructure with a basic 50 foot boom and a 40 ton block tackle. It is capable of being converted for use in lifting, clamshell, dragline, pile driving, wrecking ball, shovel and backhoe operations.

Crane, Truck, Warehouse	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

This crane is an industrial warehouse materiel handling crane with a self-propelled rotating and telescoping boom. It is diesel engine driven and can be used on paved or semi-paved surfaces. It is authorized TDE& TDA organizations at depots, ports and army installations. This crane can lift loads up to 10K lb..

Crushing, Screening and Washing Plant (CSWP)	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

This item is a portable, diesel/electric powered system composed of a primary Jaw Crushing unit, a secondary crushing unit, and a tertiary washing and screening unit, delivery conveyors, power generation equipment, and all other components required to provide a complete and operational crushing and screening plant. The crushing/screening plant produces a minimum of 150 tons per hour of product suitable for base stone and concrete aggregate materials to be used in construction and maintenance of roads and airfields.

CTG, 60 mm Mortar, IR Illumination XM767	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm mortar infrared illumination round with M776 mechanical time fuze.

CTG, Mortar 120mm XM929 Smoke	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 120MM smoke obscurant mortar round with M745 PD fuze.

CTG, Mortar 60mm M888	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm High Explosive round with M435 PD Fuze.

CTG, Mortar, 120mm XM930 Illumination	PM, Mortars	EMD	DSA, TACOM	COL(P)

A 120mm illumination mortar round with M776 mechanical time fuze.

CTG, Mortar, 120mm, IR Illumination XM983	PM, Mortars	EMD	DSA, TACOM	COL(P)

A 120mm mortar infrared illumination round with M776mechanical time fuze.

CTG, Mortar, 120mm, M929	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 120mm smoke obscurant mortar round with M734A1 multi-option fuze.

CTG, Mortar, 120mm, M931, Full Range Training	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 120mm mortar full range training round.

CTG, Mortar, 120mm, M933 HE	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

120mm high explosive mortar round with M745 PD Fuze.

CTG, Mortar, 60mm M721	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm mortar standard white light illumination round with M776 fuze.

CTG, Mortar, 60mm M766	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm mortar low cost, short range practice round. Reusable (25X), eliminates sabot and separate sub-cal cartridges for each zone.

CTG, Mortar, 60mm, M720A1 HE	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60MM High Explosive round with M734A1 multi-option fuze.

CTG, Mortar, 81mm M821A1	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

An 81mm mortar high explosive round w/M734 Multi-Option Fuze.

CTG, Mortar, 81mm XM816	PM, Mortars	EMD	DSA, TACOM	COL(P)

An 81mm mortar infrared illumination round with M772 mechanical time fuze.

CTG, Mortar, 81mm, M889A1	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

An 81mm mortar high explosive round w/M935 Point Detonating Fuze.

CTG, Mortar, M821A2	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

An 81mm mortar high explosive round with M734A1 multi-option fuze.

CTG, Mortar, M934, HE	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

120 mm high explosive mortar round with M734 Fuze.

CTG, Mortar, M934A1, HE	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

120mm high explosive mortar round with M734A1 Fuze

Deployable Universal Combat	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

Earth Mover (DEUCE)

The DEUCE is a high-speed, high mobility, earth-moving system capable of conducting the following activities: clearing, leveling, and excavation operations in support of mobility, countermobility, survivability, and sustained light engineering missions.

Dispenser, Mine M139	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Carries and dispenses Volcano Canister, mounted on 5-ton truck, M548 or UH-60 Helicopter.

Dual Mount MK93, Mod 1	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides improved weapon mount compatible with both the M2HB .50 cal MG and the MK19 40mm GMG. In support of Soldier Enhancement Program.

Explosive Standoff Minefield	PM, MCD	EMD	DSA, TACOM	COL(P)

Breacher

A joint USMC/Army Program that will be capable of clearing a breaching path across all types of minefields.

Field Artillery Ammunition	PM,	PFDOS	DSA, TACOM	COL(P)
Support Vehicle (FAASV)	Paladin/FAASV			

The FAASV Materiel Change (MC) encompasses the previously approved FAASV Howitzer Extended Life Program (HELP) and Survivability Materiel Changes. The MC incorporates M109 Family of Vehicle improvements into the FAASV in order to maintain a common chassis. These improvements include the Low-heat Rejection/Cold Start Engine, improved XTG 41104 Transmission, RAM improvements to the cooling, electrical and suspension systems, relocated heater and hydraulic reservoir, stronger fuel cells, and modifications to provide interoperability with the M109A6 Paladin Howitzer. The halon-charged fire extinguisher system will be replaced with an alternate agent system. The total FAASV MC effort for 664 systems will be performed at three sites: the Letterkenny Army Depot (442 systems), Korea (50 systems) and the remainder modified at a European site yet to be determined. In July 1996, a sole source contract to United Defense Limited Partnership was awarded for new production of 48 M992A2s for fielding to the Army National Guard as the companion resupply vehicle to Paladin.

Fighting Position Excavator	PM, MCD	PFDOS	DSA, TACOM	COL(P)

A command detonated explosive charge that will loosen soil and thereby reduce position preparation by at least 50%.

Forward Area Refueling Equipment (FARE)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

FARE provides forward area refueling of helicopters and aircraft and may also be used to refuel ground vehicles and to support special operational requirements. It consists of a 100 GPM, gasoline engine driven, diesel engine driven, or electric motor driven, pump and power source, a 100 GPM Filter Separator and hose, couplings, wyes and tees and sundry accessories.

Forward Area Water Point Supply System (FAWPSS)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This system consists of hoses, nozzles, six 500 gallon drums and a 125 GPM pump. It is used to provide fresh water at company level near the combat zone. FAWPSS is a part of CENTCOM's near-term water supply equipment.

Fuel Handling Hoseline Outfit	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The hoseline outfit is required in Corps support units (QM POL Supply Companies and QM Pipeline Terminal Operating Companies) to pass fuel forward from Corps areas to Division areas and, if the tactical situation permits, from division areas forward.

Fuel System Supply Point	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The Fuel System Supply Point (FSSP) is the Army's primary means of distributing and issuing bulk petroleum to combat forces under tactical conditions. The system consists of: 2 ea. 350 GPM Pumps; 2 ea. 350 GPM Filter Separators; hoses, fittings, wyes and tees, and 6 ea. fabric petroleum tanks.

Ground Fuel Test Kit	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The Ground Fuel Test Kit is a self-contained, portable kit for testing ground equipment fuels for contaminants and water. It measures API gravity, viscosity, trace water and sediment in the fuels being tested.

Ground Standoff Mine Detection System (GSTAMIDS)	PM, MCD	EMD	DSA, TACOM	COL(P)

Vehicle based mine detection system employing sensors on a remote teleoperated mine protected vehicle. Detects all types of anti-tank mines, supports rapid clearance of routes, and minimizes inherent risks to mine detection personnel.

Handheld Stand-off Minefield Detection System (HSTAMIDS)	PM, MCD	PDRR	DSA, TACOM	COL(P)

The HSTAMIDS system integrates a suite of sensors in a man portable system to locate non metallic and metallic AP and AT mines.

Heavy Dry Support Bridge	PM, HTV	EMD	DSA, TACOM	COL(P)

The HDSB is a 40-meter bridge that supports Military Load Capacity (MLC) 96-wheeled and MLC 70-tracked vehicle traffic along Lines of Communication (LOCs) and Main Supply Routes (MSRs). The bridge is packaged on M1077 Palletized Load System (PLS) Flatracks and is transported by the Common Bridge Transporter. The HDSB launcher is mounted on a PLS Chassis and can launch a 40-meter bridge in ninety minutes.

Heavy Equipment Transport System (HETS)	PM, HTV	PFDOS	DSA, TACOM	COL(P)

This system consists of the M1000 Heavy Equipment Transporter (HET) Semitrailer and the M1070 Truck Tractor. Together, they form a system whose primary mission is to transport main battle tanks and heavy equipment. This system also has the capability to self load and unload disabled tanks.

Heavy Expanded Mobility Tactical Truck (HEMTT)	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The HEMTT is a diesel-powered, 8-wheel drive, tactical vehicle available in five body styles (two cargoes, wrecker, tanker and tractor). The HEMTT transports ammunition, petroleum, oils and lubricants. It is also used for recovery of other wheeled support vehicles and combat systems. Early model HEMTTs are currently being overhauled by the original manufacturer to the current production configuration. Two test bed vehicles are currently being produced in preparation for a future Extended Service Program (ESP). These vehicles will be product improved variants of the tanker and wrecker with enhancements in the areas of readiness, maintainability and safety beyond the current production configuration.

High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) Family of Vehicles	PM, LTV	PFDOS	DSA, TACOM	COL(P)

The HMMWV is a lightweight, high performance, four-wheel drive, air transportable and air dropable, high mobility tactical family of wheeled vehicles. The vehicle has a diesel engine, automatic transmission and payloads of 2500 lbs. (HMMWV Group I), 3,660 lbs. (HMMWV Group II), 4,400 lbs. (Heavy HMMWV (M1097), and 5,100 lbs. (Expanded Capacity Vehicle (M1113)). The Block I, or A1 models of the HMMWV began fielding in March 1994. The A1 models have improved seating, upgraded electronics and M1097 components across the family. The A2 models will have an updated EPA compliant engine and a 4-speed automatic transmission. The Scout HMMWV is a specially modified armament carrier to accommodate the Scout mission role. The Up-Armored HMMWV (M1114) ballistic protection against anti-tank and anti-personnel mines (up to 12 pounds of TNT) and 360 degree protection aginst 7.62 armor piercing munitions. The Expanded Capacity Vehicle (ECV) (M1113) will be used for other programs where the M1097 has insufficient capacity. The A4 model is expected to be available starting in FY02/03 to enable the HMMWV to meet the light vehicle requirements for Vision XXI.

High Mobility Trailer (HMT)	PM, LTV	PFDOS	DSA, TACOM	COL(P)

The High Mobility Trailer (HMT) is a family of high mobility companion trailers for the High Mobility Multipurpose Wheeled Vehicle (HMMWV). The HMT is compatible with both the light (Group I/II) and heavy (Group III) HMMWV variants. These HMMWV variants require a HMT family of trailers (light, heavy and heavy chassis) make full use of the HMMWV's towing capabilities.

Hydraulic Excavator	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The Hydraulic Excavator (HYEX) is a commercial off the shelf item of construction equipment. The HYEX is a track mounted, hydraulic controlled, excavating system with a quick disconnect coupler system which allows it to use a variety of different construction attachments. Three types will be procured, Type I - equipped for use in general digging, trenching, loading, and lifting operations; Type II - equipped with a rock drill and a bucket for use in quarry operations. Type III will be a heavy excavator with attachments for use in heavy duty quarry operations.

Improved Mortar Ballistic Computer XM30	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

Improved Mortar Ballistic Computer, XM30 replaces M23 MBC, computes firing data for all mortar systems and enhances "shoot and scoot" capability.

Improved Ribbon Bridge (IRB)	PM, HTV	EMD	DSA, TACOM	COL(P)

The IRB provides the combat engineers with a much more capable Improved Common Bridge Transporter (ICBT) and ribbon bridge bays (interior and ramp) with 70 ton capability. The new ICBT will transport the Heavy Dry Support Bridge (HDSB) as well as other bridging assets.

Inland Petroleum Distribution System (IPDS)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

IPDS is a rapid deployment, general support, bulk fuel storage and pipeline system. It is made up of fuel units, pipeline connection assemblies, pipeline pump stations, pipeline sets and special purpose equipment. The system also includes facilities, software, training, and planning documentation. The system is modular in design and can be tailored for specific locations and operations. The IPDS provides bulk fuels support to military forces when deployed worldwide. As Operational Projects Stocks, IPDS supports Unified Command contingency plans during execution.

Intelligent Combat Outpost (Raptor)	PM, MCD	PDRR	DSA, TACOM	COL(P)

Autonomous Command and Control System that uses advanced acoustic sensors to provide real time targeting data and increased situational awareness. Will enhance effectiveness of Wide Area Munition and other munitions/demolition devices through coordinated attack and elimination of the need for overwatch forces.

Interim Vehicle Mounted Mine Detector (IVMMD)	PM, MCD	PFDOS	DSA, TACOM	COL(P)

IVMMD is a vehicle mounted mine detection system on a survivable vehicle platform.

IR Illumination Hand Grenade	PM, Small Arms	EMD	DSA, TACOM	COL(P)

The IR illuminating Hand Grenade will reduce visible signature for signalling and it will illuminate buildup position for NVDS. Supports the Soldier Enhancement Program.

Items Less Than $2M	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

Five different pumps ranging from 65 GPM to 650 GPM, fabric tanks ranging in capacity from 3,000 to 50,000 gallons, and various water storage configurations ranging from 20K to 800K gallon capacity. Designed to store and distribute fresh drinking water to all US or Allied forces operating in support of military or humanitarian operations.

Joint Service Combat Shotgun	PM, Small Arms	EMD	DSA, TACOM	COL(P)

JSCS is a 12 Ga semi-automatic shotgun with an effective range of 40 meters. It is compatible with standard ammunition and will manually cycle current Non-lethal munitions. This program will adopt this shotgun for use wqithin the Army. Supports the Soldier Enhancement Program.

Launched Grapnel Hook (LGH)	PM, MCD	PFDOS	DSA, TACOM	COL(P)

This is a Soldier Enhancement Program funded man-portable, bullet trap launched grapnel tethered to a launch point. It replaces the hand thrown grapnel in trip wire clearance operations.

Lightweight Arctic Forward Area Refueling Equipment (LAFARE)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The LAFARE is a two point tactical refueling system specifically designed for operation in extreme cold environments (-60 degrees F). It consists of a gas turbine engine driven pump unit, two filter separators, two insulated batteries, and three 500 gallon arctic fuel drums. In operation, the system will simultaneously refuel two pieces of equipment at a minimum flow rate of 50 GPM and a maximum of 90 GPM flow rate at any one nozzle. Emphasis is placed on limiting the component/module weight to the two soldier portable weight limit. This is a P3I aimed at reducing the weight of the Arctic Forward Area Refueling Equipment (AFARE).

Lightweight Fragmentation Grenade	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a light weight (approx. 1/3 reduction of current weight) fragmentation hand grenade to the soldier. A Soldier Enhancement Program supporting the Land Warrior Program.

Lightweight Water Purifier (LWP)	PM, PAWS	EMD	DSA, TACOM	COL(P)

LWP provides fresh drinking water to companies operating near the combat zone in harsh and arid environments. It is designed to produce up to 125 GPH of fresh drinking water.

Long Range Sniper Rifle	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Type classifies and fields a long range sniper rifle with counter sniper and anti-materiel effectiveness. Supports the Soldier Enhancement Program.

Long Range Tactical Sniper Cartridge	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides Caliber .50 match-grade cartridges for the long range sniper weapon with an effective range out to 1500 meters. Supports the Soldier Enhancement Program.

M1022A1 Dolly Set, Transportable Shelter, 7 1/2 Ton	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M1022A1 provides rapid mobility for International Standard Organization (ISO) containers and military shelters. A dolly set is comprised of two separate and independent halves, a front half and a rear half. Each half can easily and quickly be attached to the ends of a shelter or container which is positioned on the ground, making up a trailer (a Container Loading Trailer, or CLT). Using dolly set power, the trailer can be raised to traveling height, attached to a tow vehicle, and moved to a new destination.

M105A3 Cargo Trailer, 1 1/2 ton, 2 wheeled	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M105A3 is a two-wheeled, 1 1/2 ton cart-type trailer which is used to transport general cargo over highways as well as cross-country terrain. It is capable of fording hard-bottomed water crossings. The trailer is Roll-on/Roll-off capable and is fitted with radial tires. This trailer is an integral part of the following systems: AH-64, CH-47D, Woodworking Shop, MSE, MLRS, HAWK, Patriot, M20 NBC Decontamination system and the DS2 Pump/Scrub Decontamination system. It is also used throughout the Army to haul general cargo.

M1061A1 5-Ton, 4-Wheel, Flatbed Trailer	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M1061A1 mounts fuel pods (Tank Unit, Liquid Dispensing (TULD)), laundry units, and 100 kW generators. It is towed by the 5-ton M809 series of tractors.

M1062 Semitrailer	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M1062 Semitrailer was developed to haul 7,500 gallons of petroleum products in the Communication Zone (COMMZ) and corps rear areas. The commercial M1062 semitrailer is designed to transport/dispense bulkhaul gasoline, diesel and aviation fuels. It has a bottom and top-loading capability and uses a standard 4-inch camlock coupling and NATO D-1 coupling. The tank contains a jet level sensor system which senses the fuel level in the tank. When filling the tank from the bottom, it automatically shuts off when the tank is full. Fuel discharge is accomplished using gravity or an off-line pump with the emergency shutoff. The system also has a vapor recovery system. It is towed by the M915 series tractors.

M113 Carrier Mod-Vehicle A3 Upgrades	PM, M113/M60	PFDOS	DSA, TACOM	COL(P)

The M113 Family of Vehicles provides essential transport for troops, antitank weapons, air defense systems, electronic warfare shelters, mortars, command centers, and cargo. The current fleet will be required for at least 20-30 more years and must be continuously modified to enhance performance, reliability, survivability, and supportability. The M113 FOV consists of the following vehicles: M113, M577, M548, M901, M981, M1059, M1064, M1068, M58 and opposing forces surrogate vehicle.

M129A4 Tactical Transport Semitrailer Van	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M129A4 is a 12 ton, 35 foot, four wheel, multipurpose van used by various types of support units engaging in the storage, transportation, and issue of military supplies. The van will house sophisticated electrical equipment (radio and computerized) for command post communications, and spare parts and maintenance tool shop for field repairs. It is towed by 5-ton, 6x6 truck tractor or similar vehicle equipped with a fifth wheel.

M16 A4 Rifle	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Th M16A4 rifle is an improved version of the M16A2 rifle. The improvement consists of a flat top upper receiver accessory rail, and a detachable handle/rear aperture sight assrembly that allows for easy attachment of accessories such as Night Vision Devices.

M203/M4 Compatibility	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides a method of mounting the M203 Grenade Launcher on the M4 Carbine. This program is in support of the Soldier Enhancement Program.

M240B Armor Machine Gun, 7.62mm	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

The M240B is being procured to provide dismounted infantrymen with a more reliable, accurate and lethal machine gun to suppress and destroy enemy personnel, lightly armored vehicles and fortified positions. It is a gas-operated, air-cooled, link-belt fed weapon which allows for rapid barrel changes and incorporation of a flash suppresser. The M240B will replace the M60 Machine Gun in light infantry, mechanized infantry and combat engineering units.

M2HB Quick Change Barrel	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides an NDI commercially available kit to convert M2HB Machine Gun to a fixed headspace, quick change barrel configuration.

M30 Improved Mortar Ballistic Computer	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

The M30 is a militarized laptop computer which computes ballistic trajectories and gives mortar gunners data for elevation and change to bring effective fire.

M6(M998) and M197(M1025) HMMWV Machine Gun Mounts	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides the capability to mount M249 and M60 machine guns on the M998 and M1025 HMMWV for improved self-protection. The mounting system includes the pedestal, pintle, and travel locks. Supports the Soldier Enhancement Program.

M860A1 Semitrailer	Trlr Mgmt Ofc	PFDOS	DSA, TACOM	COL(P)

The M860 series semitrailer is used with the PATRIOT missile system. The M860A1 is a flatbed gooseneck semitrailer equipped with a fail-safe air brake system and manually adjusted landing legs. The prime mover is a HEMTT 10-ton truck tractor. The M860A1 is also equipped with a stabilization system consisting of our legs that are used to emplace the semitrailer during missile launching operations.

M870A2 Semitrailer	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M870A2 Semitrailer lowbed will be a 40 ton system capable of handling payload up to 80,000 lb.. on highway, gravel roads, dirt roads, level cross country, and hilly cross country. The M870A2 will incorporate a fixed gooseneck, rear loading capability and automatic slack adjusters. The M870A2 will be a multi-axle suspension system equipped with radial tires. The M870A2 will connect to its prime mover's fifth wheel via a reversible king pin (2 and 3.5 inches capable). The landing legs will be adjustable to accommodate varying degrees of fifth wheel heights. The semitrailer will utilize a 12/24 volt electrical system including two composite lights, which serve as blackout and service tail and stop lights.

M871A3 Semitrailer FB BB/Cont Trailer	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M871A2 is a 22 1/2 ton semitrailer, dual purpose, bulk container transporter. The semitrailer will be used within the military logistical support system within CONUS and OCONUS theaters to transport 20' International Standard Organization (ISO) Containers on line haul tactical missions and as the primary means of distributing containers and bulk cargo. It will be employed with military standard 5 ton tractors for use over primary, secondary, and unimproved secondary roads.

M878 Yard Tractor	PM, TAWS	EMD	DSA, TACOM	COL(P)

The yard type truck is primarily used to provide a capability to shuttle semitrailers loaded with containers or breakbulk cargo within fixed ports, on prepared beaches during Logistics-Over-The-Shore (LOTS) operations, and in trailer transfer areas. The vehicle is a highly maneuverable commercial tractor with an automatic locking, hydraulic-lift fifth wheel which facilitates semitrailer coupling and disengagement and allows movement of the semitrailer/chassis without retracting the landing legs. It is capable of moving trailers weighing from 21,000 to 60,000 lb..

M9 Armored Combat Earth Mover Mod Program	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M9 is a highly mobile, fully tracked, armored earthmover capable of supporting forces in both offensive and defensive operations. It performs critical combat engineer tasks such as digging hull defilade fighting positions, breaching berms, and preparing anti-tank ditches. There are several planned modification programs for the M9 under the nomenclature Systems Improvement Plan (SIP). The SIP Phase 3 consists of ten hardware improvements designed to enhance the readiness of the ACE. Phase 4 is in planning for possible application in FY02 or beyond.

M903, M962, .50 Cal SLAP	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

A caliber .50 round designed to maximize the effectiveness of the M2 machine gun in the engagement and defeat of lightly armored targets. This program provides a companion tracer round. Supports the Soldier Enhancement Program.

M915A3 Truck	PM, TAWS	EMD	DSA, TACOM	COL(P)

The M915A3 tractor is a Non-Developmental Item vehicle which serves as the prime mover for either the M872 34 ton flatbed semitrailer or the M106 7500 gallon tanker. These tractor semitrailer combinations carry all types of bulk cargo, containers and fuel and operate primarily over roads in the communication zone and Corps areas of operation in all weather conditions. The M915A3 truck tractor is transportable by highway, rail, marine, and air modes worldwide.

M916A2 Truck	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M9162A2 truck tractor is a Non-Developmental Item vehicle which serves as the prime mover for the M870/M870A1 40 ton lowbed semitrailer and the 6,000 gallon water tanker. The tractor is a 6x6, 68,000 Gross Vehicle Weight vehicle with a 3 1/2 inch fully oscillating fifth wheel and 45,000 lb. rear mounted winch. The tractor lowbed and water tanker semitrailer combinations transport all types of heavy engineer equipment and non-portable water in support of engineer construction operations over primary, secondary, and off-roads in all weather conditions. The M9162A truck tractor is transportable by highway, rail, marine, and air modes of transportation.

M917A1 Truck, Dump 20T	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M917A1 dump truck is a Non-Developmental Item used to load, transport and dump payloads of sand and gravel aggregates, crushed rock, hot paving mixes, earth, clay, rubble, and large boulders at engineering and construction sites under worldwide climatic conditions in a military environment. It has a heavy duty steel, 18.5 ton, 12 cubic yard struck and 14 cubic yard heaped capacity dump truck, in cab controlled double controlled action hydraulic hoist system capable of a 50 degree tilt angle, 8 inch removable sideboards, easy wind tarpaulin system and air actuated tailgate lock. The M917A1 dump truck is transportable by highway, rail, marine, and air modes worldwide.

M939A2 5-Ton Truck Series Mod Program	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M939A2 is a general purpose truck used to haul cargo, ammunition and personnel. The modification program is to prevent the fuel tank from venting into the vehicle air intake. It will vent into the atmosphere preventing the possibility of uncontrolled engine run-on and engine destruction.

M967A1 Bulkhauler	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The low profile, bulkhaul semitrailer has a stainless steel, single compartment tank of 5,000-gallon capacity, plus 3% for product expansion. It is designed to transport/dispense gasoline, diesel, and aviation fuels. The vehicle is air transportable when empty on the C130, C141, or C5A aircraft. It is towed by the 5-ton Truck Tractor.

M969A2 Semitrailer, Tank, 5000 Gallon Automotive Refueler	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M969A2 is used primarily for transporting and dispensing automotive fuel. The trailer has a stainless steel, single compartment tank of 5000 gallon capacity, plus 3% capacity for product expansion. This system can deliver 100 gallons/minute and can be lifted, fully loaded, on and off ship. It is air transportable on C130, C141 or C5A aircraft. It is towed by the 5-ton truck tractor.

M993, 7.62mm Armor Piercing Cartridge	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides a 7.62mm Armor Piercing Cartridge for the M60 and M240B Machine Guns and the M24 Sniper Rifle. Supports the Soldier Enhancement Program.

Machine Gun Optics	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Telescopic sight for the M249, M60 and M240E1 machine guns. In support of Soldier Enhancement Program.

Machine Gun, 5.56, M249, Squad Automatic Weapon	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The M249 Squad Automatic Weapon provides a lightweight, one-man portable machine gun capable of delivering a large volume of effective fire to support infantry squad operations.

Machine Gun, Grenade, 40mm: Mk19 Mod 3	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Anti-Personnel/Anti-Light Armor Automatic Grenade Launcher. It uses linked ammunition and fires from the open bolt mode using a modified blow-back type mechanism. The weapon is designed to fire 40mm high velocity series grenade rounds and can be either ground or vehicle mounted.

Mobile Water Treatment	PM, PAWS	PDRR	DSA, TACOM	COL(P)

This project will develop a system to collect and treat wastewater generated in the field. Treatment of waste from hospitals, laundry and bath, and ROWPU operations is aimed towards control of disease and reduction of negative health effects of contaminated wastewater.

Modern Mount	PM, Small Arms	EMD	DSA, TACOM	COL(P)

The Modern Mount provides quick and easy movement for traversing and elevation, reduces looseness between weapon and mount, and provides safe, bold and accurate fire on targets at all engagement ranges for Heavy Machine Guns.

Modernized Demolition Initiatives (MDI)	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Modernized Demolition Initiatives (MDI) is an expendable non-electric initiation system that utilizes shock tube to transmit initiation signals to explosives and demolition devices.

Modular Base Petroleum Laboratory	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

A highly mobile petroleum lab used to test the quality of military petroleum products. The system is housed in two 40 foot semi-trailers which can be rapidly deployed to an area of operations anywhere in the world. This capability eliminates the need for building or leasing fixed base facilities.

Modular Crowd Control Munition (MCCM)	PM, MCD	PDRR	DSA, TACOM	COL(P)

Less than Lethal means of breaking up large groups of hostile personnel. Provides incapacitation of personnel through robust flash-bang and stinging rubber balls. Capable of being mounted on vehicles with special mounting bracket.

Modular Weapon System	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides a system of mounting rails/methods for Rifles/Carbines Attaching Sights, and Accessories. Allows combat commander to custom configure weapons based upon mission needs. Key vcomponent of Land Warrior Lethality.

Mortar Fire Control System	PM, Mortars	EMD	DSA, TACOM	COL(P)

Mortar Fire Control System (MFCS) is a digitized fire control system that includes a fire control computer, position navigation, and gun pointing. MFCS integrates mortar platoons into the current and future fire support command and control architecture.

Mortar, 120mm, Weapon System, M121	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

The M121 Mortar Weapon System is a 120mm mortar system mounted in the M1064/M1064A3 carriers.

Mount, GMG, MK64, Mod 9	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Material change to the mount for the 40mm, anti-personnel/anti-light armor automatic grenade launcher, which improves accuracy of the MK64 mount. Supports the Soldier Enhancement Program.

Non-Lethal 40mm Cartridge	PM, Small Arms	EMD	DSA, TACOM	COL(P)

A 40mm non-lethal cartridge for use with the M203 grenade launcher. It will provide a less than lethal means of crowd control. This program is in support of the Soldier Enhancement Program.

Nuclear Tester	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

This tester is used to measure the density and moisture levels of soils and asphalt samples by engineer construction units. It contains radio-active materiel, is serial number controlled, and managed under nuclear regulatory commission license granted to TACOM.

Objective Individual Combat Weapon (OICW)	PM, Small Arms	PDRR	DSA, TACOM	COL(P)

The OICW will demonstrate the next generation Infantry weapon with modular, dual barrel that combines the lethality of a 20mm air-bursting munition, 5.56mm NATO ammunition and a full solution fire control system. The air-bursting munition will be capable of defeating targets in defilade at a standoff range of 1000 meters. OICW is thlethality block upgrade to the Land Warrior Program. This program will transition to PMSA 1QFY00

Packaged Water System (PWS)	PM, PAWS	PDRR	DSA, TACOM	COL(P)

The Packaged Water System will be used to resupply combat forces with drinking water during early entry and prior to arrival of Combat Service Support Units. It will also be used to resupply troops in an NBC environment and reduce reliance on host nation support.

Palletized Load System (PLS) Bituminous Distributor Module	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The M1075 PLS Bituminous Distributor module is a Non-Developmental Item which is detachable from the M1075 PLS truck. It has a 2,800 gallon capacity for hot bitumen and is independently powered by a powered pump. It is used to deliver liquid bitumen for road and airfield construction. The M1075 PLS truck and M1076 PLS trailer are transportable by highway, rail, marine, and air modes.

Palletized Load System (PLS) Truck Concrete Mobile Mixer Module, 8 CU YD	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The PLS concrete mobile module is a Non-Developmental Item module which is detachable from the M1075 PLS truck and is used to manufacture, transport, and pour concrete. It has a special 8 cubic yard capacity body with compartments for water, sand, gravel, and cement. Cement products are loaded from the top and flow to a chute for mixing and distribution out the rear of the vehicle. The system is powered independly from the PLS truck and is able to be transported by the M1076 PLS trailer. The M1075 PLS truck and M1076 PLS trailer are transportable by highway, rail, marine, and air modes.

Penetration Augmented Munition (PAM)	PM, MCD	EMD	DSA, TACOM	COL(P)

Manportable multi-stage munition that attaches to and defeats large reinforced bridge piers.

Petroleum Quality Analysis System (PQAS)	PM, PAWS	PDRR	DSA, TACOM	COL(P)

PQAS is a highly mobile, transportable, modern laboratory for on-site testing and analysis of all common military fuels acquired from a variety of sources. The PQAS is lightweight, compact and sufficiently rugged to allow transporting on and operating from a HMMWV. The PQAS is operated on the extended battlefield and will accommodate all tests necessary to determine fuel quality. This system will replace the Airmobile Petroleum Laboratory.

Petroleum Quality Surviellence Laboratory (PQSL)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This mobile lab provides quality surveillance testing under field conditions and also has a limited capability to perform procurement acceptance testing of petroleum products.

POL 10,000 Gallon Fabric Tank Assembly	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This is a separately authorized component of the Fuel System Supply Point and also serves as an auxiliary tank for special operations.

POL 20,000 Gallon Tank	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 20.000 Gallon POL Tank Assembly is a separately authorized component of the FSB and also serves as an auxiliary tank for special operations.

POL 3000 Gallon Fabric Tank	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 3000 Gallon Fabric Tank is an associated item of the Modular Fuel System Supply Point which is in the development stage and is an upgrade of the current Fuel System Supply Point. It is also authorized in some combat support units.

POL 350 GPM Filter Separator	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 350 GPM Filter Separator has multiple uses with its main application to the fuel System Supply Point. Other uses include support to the HEMTT Aviation Refueling System and refueling on the move. It supports the Army's primary means of distributing and issuing usable petroleum to combat forces under tactical conditions by filtering sediment and water from the fuel.

POL 350 GPM Pump (Regulated)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 350 GPM Pump (Regulated) is a multi-purpose pump with its primary application to the hoseline outfit. It supports the Army's primary means of distributing and issuing petroleum to combat forces under tactical conditions.

POL 50 GPM Pump	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 50 GPM Pump is an auxiliary/utility pump required in all types of Army units for multiple usage. This includes drawing fuel from storage tanks and from collapsible or 42-gallon metal drums. It also has general use in unit, battalion, and higher support units.

POL 50,000 Gallon Fabric Tank Assembly	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 50,000 Gallon Fabric Tank Assembly is a separately authorized component of the Fuel System Supply Point, Inland Petroleum Distribution System, and also serves as an auxiliary tank for special operations.

POL 600 Gallon Trailer Mounted Tank Unit	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 600 Gallon Trailer Mounted Tank Unit is a component of the high profile Tank and Pump Unit (Truck Mounted), Tank Unit, Liquid Dispensing for Trailer Mounting and also issued as a separate or replacement item.

POL Items less than $5M	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The equipment procured with this "basket" program supports the Army mission of providing bulk petroleum fuel distribution to all DoD level based forces in a theater of operations. The program includes a wide variety of low unit cost, high usage items such as POL tanks, pumps, test equipment and storage and distribution systems. Each has an annual procurement of $2M or less.

Precision Guided Mortar	PM, Mortars	PDRR	DSA, TACOM	COL(P)

Precision guided Mortar Munition 81mm and 120mm autonomous anti-tank mortar munitions utilizing state of the art technologies.

Radiological Water Monitor	PM, PAWS	PDRR	DSA, TACOM	COL(P)

This program covers the development of a system which will be able to measure radioactivity in raw and product water to determine if radiation health criteria are being met. Currently the Army does not have adequate capability to monitor raw and product water for the established levels of radioactivity. The system has to be able to measure 1000 picocuries per liter against a background gamma radiation level of up to 100 milliroentgen per hour. The system will be used by Quartermaster Units to select raw water sources and by Preventive Medicine teams to approve water for potable uses.

Rail Adapter System (RAS), XM4/M5	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

This system provides a mounting surface for M16 rifles and M4 carbines which will allow attachment of day and night sights and other accessories. A Soldier Enhancement Program supporting the Land Warrior System.

Remote Activated Munition System (RAMS)	PM, MCD	EMD	DSA, TACOM	COL(P)

Lightweight transmitter/receiver that is compatible with demolition munitions and other Special Operations Force equipment.

Remote Mount/Common Remotely Operated Weapon System (CROWS)	PM, Small Arms	EMD	DSA, TACOM	COL(P)

A remote vehicle mounting system for heavy and medium machine guns MK 19 GMG, .50 Cal M2, M240, and Objective Crew Served Weapon (OCSW). Improved system accuracy and operational response time. Modular, open architecture will readily allow future improvements.

Rifle Launched Non-Lethal Munition	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a muzzle launched cartridge for the M16A2/A4 rifle and the M4 carbine for use in non-lethal crowd control. Supports the Soldier Enhancement Program.

Rough Terrain Container Crane (RTCC)	PM, TAWS	EMD	DSA, TACOM	COL(P)

The RTCC is a diesel engine driven vehicle with pneumatic tires, all wheel drive/steer carrier, and a superstructure with a hydraulically operated telescoping boom capable of 360 degree rotation while loaded. This program supports units identified in the Logistic Unit Productivity Study. The RTCC will replace the 50,000 lb Rough Terrain Container Handler in GS ammo units and the 140 ton crane in Terminal Transfer Units.

Rough Terrain Container Handler (RTCH)	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

This acquisition is a re-procurement and will be procured as a non-developmental item. The 50K Rough Terrain Container Handler (RTCH) can stack 8 foot wide, 20 & 40 foot long ISO containers two high as well as handle 50K conventional forklift loads if equipped with fork tines. The vehicle is diesel engine driven and was engineered by combining a commercial chassis designed for rough terrain operations with a commercial forklift mast and container handling top attachments. The RTCH is four wheel drive and capable of fording up to 5 feet in saltwater. It is used by Transportation Cargo Transfer Companies, Transportation Terminal Service Companies, and General Support Ammunition Companies to transfer containers from the ground to waiting transportation, or from one mode of transportation to another. The RTCH mission requirements have expanded from depots, OTS airfields, rail yards, and sea ports to beach operations and Corps, Division, and Bridge forward support areas.

Rough Terrain Container Handler Rebuild Program	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

The Rough Terrain Container Handler (RTCH) is used to stack either 20 ft. or 40 ft. ISO container weighing up to 50,000 lb.. These RTCH's are 15 years old. The rebuild program, which brings the vehicles back to their original performance specifications, is expected to extend the service life by 10 years and will yield cost savings over a new acquisition.

Scoop Loader	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

Scoop loaders (4-1/2 to 5 cu. yd capacity) are diesel engine driven 4X4 versatile items of equipment with rear axle oscillation and articulated frame steering. They are primarily used for loading trucks in rock quarries and after excavating earth, loose rock or sand.

Scraper, Elevating	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

Self-Propelled, 11 CU YD

This scraper is used by Airborne/Airmobile Combat Engineering Units for earthmoving work, such as construction and maintenance of roads and airfields. The unit has been sectionalized into two sections for external air transport by helicopter.

Scraper, Elevating	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

Self-Propelled, 14 - 18 CU YD

This scraper is used by Heavy Combat Engineering Units for earthmoving work, such as construction and maintenance of roads and airfields.

Selectable Lightweight Attack	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Munition (SLAM)

Lightweight (2.2 lb.) munition that will defeat a variety of targets with 4 modes of operation (magnetic bottom attack, passive infrared side attack, time demolition, command detonation)

Small Arms Fire Control System	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a full solution fire control with day/night sight and laser ranging capability. It will dramatically increase first round hit probability of the MK19 Grenade Machine Gun. Supports the Soldier Enhancement Program.

Small Mobile Water Chiller	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The Small Mobile Water Chiller is a self-contained, skid-mounted, single pass water chiller. The main components consist of a diesel engine, compressor, condenser heat exchanger (evaporator) and water pump. It cools fresh drinking water for companies operating near the combat zone in harsh and arid environments. The SMWC is part of CENTCOM's Near Term Supply Equipment.

Special Operations Force Demo	PM, MCD	EMD	DSA, TACOM	COL(P)

Kit

Kit consisting of state-of-the-art warheads and demolition attaching material to provide capability to construct special purpose demolitions.

Standard Army Refueling System	PM, PAWS	PDRR	DSA, TACOM	COL(P)

(SARS)

Standardize refueling equipment that will adapt to all tactical vehicles and ground support equipment. Capable of refueling tactical vehicles in a minimum of two minutes at flow rates up to 300 GPM. The nozzle and receiving system would regulate flow and pressure, return vapor to the supply tank, and allow filling multiple tanks from one source. The current design is based on a pressure manifold type equipment fuel system, limiting the internal pressure to 18 psig on all hardware and the fuel system manifold. This nozzle and receptacle design will increase refueling rates, reduce hazards associated with "hot" refueling, reduce the possibility of fuel contamination and reduce the detection signal of the vapor plume generated during refueling.

T-9 (D7 Bulldozer)	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

The D7 is a fully tracked, low speed, medium drawbar pull bulldozer with a ripper or winch. It is used by engineer units for all types of horizontal construction projects such as roads, airfields, and emplacements.

Tactical Fuel Storage and	PM, PAWS	PDRR	DSA, TACOM	COL(P)

Distribution System

A system of components (pumping assemblies, filtration systems, hose valves and fittings) lighter in weight, yet with the same efficiency, designed to use fewer people for set-up and operation.

Tactical Water Distribution	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This system enables water to be disbursed over a ten mile or any multiple of ten miles through a hoseline/pump entity. It is used with water storage distribution systems or with the 150,000GPD ROWPU.

Tank Assembly, Fabric, Collapsible POL 10,000 gal	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

A large container fabricated of elasto-meric coated nylon used to store fuel (10,000 gal capacity).

Tank/Pump Unit Liquid Dispensing (TULD)	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

TULD is the Army's primary system to transport and dispense a second type of fuel (MOGAS or diesel) on the battlefield. This liquid dispensing tank/pump unit consists of a 500 or a 600 gallon tank, tie down kit, storage boxes, and ancillary equipment to refuel and dispense fuel from the system. It is designed for mounting on the M1061A 5-Ton trailer.

The HEMTT Tanker Refueling System (HTARS)	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

HTARS is a refueling system that allows the HEMTT tanker to refuel four aircraft simultaneously. It consists of lightweight, collapsible fabric hose; closed circuit, open port and under-wing nozzles; and quick disconnect sexless, dry-break couplings and wyes and tees.

Time Delay Firing Device (TDFD)	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Small/lightweight/expendable demolition device, extremely accurate and programmable from 5 min to 30 days. Replaces current M1 family of chemical delay

Tractor, T-5	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This is a light bulldozer that is airmobile, airdropable and helicopter transportable. It is used in airborne operations for construction and maintenance of emplacements, roads and airfields.

Tractor, Wheeled Warehouse	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This is a self-propelled diesel engine driven towing tractor, capable of towing loads up to 4,000 pounds. It is used primarily to pull tractor loads of break bulk commodities in warehouse, depots and terminal operations.

Truck, Forklift, DED, Rough Terrain, 4000 lb Capacity (4K RTFL)	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

Diesel engine driven 4,000 lb capacity forklift with off-road and fording capabilities. It is designed to enter, stuff and unstuff the Army's family of 8X8 containers using the mobile ramp where necessary. These vehicles are used by terminal transfer units, maintenance support units, supply and services units and general support units.

Truck, Forklift, Warehouse	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This forklift truck is clean burning diesel engine driven, has solid rubber tires, front wheel steering, and a hydrostatic transmission with a maximum speed of 8 mph. It is used in general warehouse operations that have sufficient ventilation for removal of contaminated air. It can lift loads up to 6k lb.. The vehicle is limited to use on paved or other improved surfaces.

Vibratory Roller	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The Vibratory Roller is intended to compact various types of cohesive and non-cohesive soils, and consolidate sand, gravel, and crushed rock for base and sub-base horizontal construction requiring high load-bearing capacity. Some of these missions include constructing/repairing roads, airfields, storage areas, base preparation of storage areas and handstand. It will replace existing compacting equipment. It comes in two sizes, a smaller one to support light and airborne units, and a standardized one for other units. This is a reprocurement and will be processed as a non-developmental item.

Volcano	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Scatterable (M139 Dispenser) surface laid mine system consisting of the following: M87 Canister containing 1 AP and 5 magnetic fuze AT mines; M88 practice canister containing expendable dummy mines; M89 training canister which simulates mine dispensing timing and sequencing; and the M87A1 which incorporates improved producibility and countermeasure resistance.

Water Items less than $2M each	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The equipment procured with this "basket" program supports the Army mission of providing potable water to soldiers in the field. It provides life sustaining water to the front line and remote units in tactical environments. In addition to consumption, those items support personal hygiene, emergency medical conditions, equipment maintenance, and nuclear, biological and chemical decontamination. The program includes a wide variety of low unit cost, high usage items such as water tanks, pumps, water purification, storage and distribution systems. Each has an annual procurement of $2 million or less.

Water Quality Analysis	PM, PAWS	PFDOS	DSA, TACOM	COL(P)
Set-Purification				

Analyzes water for total dissolved solids, turbidity, pH, temperature and chlorine residual using the latest microcomputer and electronic techniques. It is used to monitor ROWPU operations and to establish degree of treatment needed on raw water sources.

Water, Individual Purification	PM, PAWS	PDRR	DSA, TACOM	COL(P)
System				

This program will develop a water purifier to be used by small troop units located away from traditional supply chains. The unit will consist of portable modules, which when combined, will be capable of producing 50-150 GPH of potable water from any feedwater source.

XM 84 Stun Grenade II	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

A diversionary device (hand grenade) designed to confuse, disorient or distract a potential threat with minimal force. Device can be used by tactical or non tactical forces. In support of Soldier Enhancement Program.

ACAT LEVEL IV *Total: 21*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
AT-4 Multi-purpose Weapon	TACOM (ACALA)	PFDOS	DSA, TACOM	COL(P)
Trainer				

This ammunition is being procured to support training on the AT-4 system.

Barge Derrick, 100-250 Ton	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

A steel constructed craft capable of off-loading cargo from existing and projected shipping through the year 2020. Will have living accommodations for 15.

Bunker Defeat Munition (BDM)	ARDEC	PFDOS	DSA, TACOM	COL(P)

Disposable, shoulder-fired 83mm munition for neutralizing earth and timber bunker fortifications.

Causeway Systems	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The Causeway System includes the Floating Causeway, Causeway Ferry and the Roll On/Roll Off Discharge Facility. They are powered/non-powered modular building blocks that allow movement of cargo in a Logistics Over the Shore (LOTS) environment across unimproved beaches/waterways in areas of the world where fixed port facilities are unavailable, denied or unacceptable.

Collapsible Buttstock, M5	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Provides a collapsible buttstock (CBS) for use on the M249 SAW machinegun. The CBS will enhance maneuverability in airborne and MOUT operations. In support of Soldier Enhancement Program.

Contact Maintenance Truck HMMWV (CMTH)	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The CMTH is a combat support system. It is a self-contained equipment package mounted on an M1097 HMMWV to form a Contact Maintenance Truck. The equipment package consists of an enclosure mounted on the HMMWV truck chassis and contains tools and equipment required for a contact maintenance team to perform limited repairs to disabled equipment onsite.

CTG, Arty 105 HERA, M913	ARDEC	PFDOS	ARDEC	BG Geis

The XM913 High Explosive Rocket Assist 105mm artillery round improves light forces capability in the M119 howitzer. It increases range with improved

CTG, Arty 105 HERA, XM927	ARDEC	EMD	ARDEC	BG Geis

The XM927 High Explosive Rocket Assist 105mm artillery round provides an increase in range, improved lethality and is compatible with existing howitzers.

CTG, Arty 105mm DPICM, XM915/XM916	ARDEC	EMD	ARDEC	BG Geis

CTG, Arty 105mm DPICM, XM915/XM916 are 105mm cargo ejecting projectiles. One (XM916) is for use with all 105mm howitzers. The XM915 is for use with the M119 howitzer. These enhance light force capabilities.

Enhanced Remote Target System (ERETS)	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The ERETS consists of infantry and armor target mechanisms, both stationary and moving and related interface and control hardware. The Range Control Station computer provides for manual and automatic control of the target mechanisms, accumulates target hit data and prints a permanent record for evaluation of trainee performance. Simulators, which add realism to the training scenarios, include the infantry night muzzle flash simulator, armor target kill simulator, and the infantry hostile fire simulator. The ERETS is installed on various range configurations to support infantry, armor and combined arms live fire training and qualification exercises.

Flash Suppressor/Blast Attenuator for M24	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Provides the M24 Sniper Weapon System with flash/blast suppression device. This program is in support of the Soldier Enhancement Program.

Gun Laying and Positioning System (GLPS)	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Uses the military standard Precise Lightweight Global Positioning System Receiver, a commercial azimuth gyroscope theodolite and laser range finder in a tripod mounted configuration to determine position and orientation of every gun in the firing battery from one central location.

Helicopter Extended-Range Fuel System	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

Allows cargo helicopters to internally transport all of the hardware and fuel required to perform tactical refueling of other aircraft in remote locations. The system is modular and can be converted to a fuel source for the transporting aircraft to allow for extended flying time.

Hydraulic/Electric Engineer Tool Outfit	TACOM (ACALA)	PFDOS	CG, AMCOM	MG Sullivan

Formerly the Pioneer Tool Outfit (PTO), is an assembly of 102 components used in the engineering, construction, and repair of combat facilities. It contains both electric and hydraulic tools, and is powered by a DED hydraulic power unit and tools powered by a portable hydraulic motor generator (PHMG).

Improved Buttstock for M4	TACOM (ACALA)	EMD	TACOM (ACALA)	Mr. Morgan

Provides the rifleman with an ergonomically optimized buttstock for the M4 Carbine. This program is in support of the Soldier Enhancement Program.

Multiple Magazine Holder	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Provides a clip to attach two magazines together which reduces the time needed for the soldier to change magazines. This program is in support of the Soldier Enhancement Program.

Muzzle Velocity System	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The Muzzle Velocity System measures muzzle velocity of cannon artillery projectiles, replacing the M-90 Velocimeter. The M93 version is for the Paladin and the M94 version is for all other conventional artillery weapons.

Personal Defense Weapon, 9mm	TACOM (ACALA)	PFDOS	CG, TACOM	MG Caldwell

Standard issue hand gun, replaces the 45 cal. and 38 cal. hand guns.

Pusher Tug, Small	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

A steel hull craft, 61 ft. long, twin propulsors w/twin diesel inboard drive, 5 berths, dinette, 2 diesel generators, whose mission is to provide towing of LASH and general barges in harbors, inland waterways, and along coastlines.

Ranger Anti-Armor, Anti-Personnel Weapon System (RAAWS)	ARDEC	PFDOS	DSA, TACOM	COL(P)

The Ranger Anti-Armor, Anti-Personnel Weapon System is an 84mm recoilless rifle and family of ammunition designed to defeat lightly armored targets, personnel and field fortifications. This NDI effort is specifically for the SOF-Rangers.

Simulators, Threat Que, M25/M26/M27/M79	TACOM (ACALA)	PFDOS	CG, TACOM	MG Caldwell

Series of computer/radio controlled firing fixtures providing cues from simulated threat vehicles during heavy armor firing practice.

ORGANIZATION JPO, BD *Total: 3*

ACAT LEVEL II *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Joint Vaccine Acquisition Program (JVAP)	PM, JVAP	PDRR/PFDOS	JPM, BD	BG Cain

The JVAP is an effort to ensure a supply of vaccines and other medical products effective against validated biological warfare threat agents. The JVAP Prime System Contractor, DynPort LLC, will develop and test vaccine candidates for FDA Licensure. After FDA licensure, the contractor will produce, test, store, and distribute these products as required by the Services to protect U.S. forces.

ACAT LEVEL III *Total: 2*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Biological Integrated Detection System (BIDS)	PD, BD	PFDOS	JPM, BD	BG Cain

BIDS is an integrated biological detection suite employing complementary technologies for large area detection, identification and warning that a biological attack has occurred. The system is installed in an M-788 shelter which is mounted on an M-1097 HMMWV. BIDS is a three phased program. The first 38 BIDS NDI systems were fielded to the 310th Chemical Company in 4QFY96 . The second company of 38 BIDS P3I systems are being fielded to the 7th Chemical Company at Ft. Polk. Fielding will be completed 4QFY99 . The third company of 38 BIDS systems will be fielded with the Joint Biological Point Detection System (JBPDS) beginning in FY 01. The JBPDS is a common biological detection suite utilized by all the Services.

Joint Biological Point Detection System (JBPDS)	PM, JBPDS	EMD	JPM, BD	BG Cain

The JBPDS will develop and field a biological detection system that meets the needs of the Army, Navy, Air Force, and Marine Corps. The JBPDS is a Block development program. Block I focuses development on fully automating the bio suite. Block I will be capable of simultaneously and automatically presumptively identifying ten BW agents in less than 15 minutes. Block II will focus on decreasing size, weight and power consumption. The JBPDS will be integrated into each Service's platform (e.g., HMMV, ship) air base, or port to provide a common detection capability for joint interoperability and supportability. Production of the first 104 systems will begin in FY 00. Funding is available for 830 systems.

ORGANIZATION PEO, AMD *Total: 5*

ACAT LEVEL ID *Total: 4*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Medium Extended Air Defense System (MEADS)	PM, MEADS NPO	PDRR	USD(A&T)	Dr. Gansler

The Medium Extended Air Defense System (MEADS) will provide lower tier air, theater missile defense, and cruise missile defense to the maneuver forces and other critical forward deployed assets throughout all phases of tactical operations. MEADS will operate both in an enclave with upper tier systems in areas of debarkation and assembly and provide continuous coverage alone or with Forward Area Air Defense systems in the division area of the battlefield during movement to contact and decisive operations. MEADS will utilize a combination of a netted and distributed architecture, modularly configurable battle elements, interoperability with other airborne and ground based sensors, and improved seeker/sensor components to provide a robust 360 degree defense against the full spectrum of TBM, cruise missile, unmanned aerial vehicle, TASM, rotary wing, and forward wing threats. The Army is Executive Agent for this DoD ACAT ID BMDO program

National Missile Defense (NMD) Ground Based Elements (GBE)	PM, GBE	PDRR	USD(A&T)	Dr. Gansler

The National Missile Defense (NMD) system will provide highly effective protection of the fifty United States, power projection forces, population, and industrial base against limited strategic ballistic missile attacks. The United States currently has no defense against intercontinental strategic ballistic missile threats. The initial fixed-site, ground-based NMD system will be capable of conducting multiple, simultaneous, over-the-horizon, hit-to-kill intercepts of threat warheads. The threats will be destroyed in their midcourse phase of flight at long ranges well outside the earth's atmosphere for effective protection on the ground. The initial NMD system consists of the dedicated Ground Based Elements that will operate in conjunction with the Integrated Tactical Warning and Attack Assessment System (ITW/AA) in Cheyenne Mountain. The ITW/AA system is supported by the Defense Support Program (DSP), the Space Based Infrared System (SBIRS), and Upgraded Early Warning Radars (UEWR). The Ground Based Elements consist of the Ground Based Interceptor (GBI), the X-Band Radar (XBR), and part of the Battle Management, Command, Control, and Communications (BMC3). The initial system will include 20-100 GBI missiles, one or more XBRs, Execution Level BMC3 at the Deployment Site(s), and Command Level BMC3 in Colorado Springs integrated with the ITW/AA System. The GBI is a dormant, long-range, high-velocity, hit-to-kill missile consisting of an Exoatmospheric Kill Vehicle (EKV) on a three-stage, solid-rocket booster with associated command, launch, and support equipment. The EKV includes a multi-color, long-wave infrared sensor subsystem; inertial guidance, navigation, and control subsystem; and divert and attitude control subsystem. The XBR is a wide bandwidth, solid state, phased array radar that provides precision long-range acquisition, tracking, discrimination, and hit assessment. The BMC3 provides highly-automated, fault-tolerant engagement planning and decision aids for the operators, inter- and intra-site connectivity including the NMD Communications Network (NCN), and the In-Flight Interceptor Communications System (IFICS) that provides target updates and target object maps to the interceptor after launch. The NMD program is a joint service program led by the Ballistic Missile Defense Organization (BMDO). The Army is the BMDO Executive Agent for the dedicated Ground Based Elements of the ACAT ID Joint NMD Program. The Army (active and reserve components) will field, operate, and sustain the Ground Based Elements.

Patriot Advanced Capability (Patriot PAC-3)	PM, Patriot	PFDOS	USD(A&T)	Dr. Gansler

The Patriot Missile System provides high- and medium-altitude air defense capability for critical assets and maneuver forces belonging to the corps and to echelons above corps. The Patriot Advanced Capability-3 (PAC-3) missile is a high velocity hit-to- kill, surface-to-air missile capable of intercepting and destroying both maneuvering and non-maneuvering tactical ballistic missiles and air breating threats such as cruise missiles and aircraft. The Pac-3 missile provides the range, accuracy, and lethality to effectively defend against tactical missiles with conventional high explosive, biological, chemical, and nuclear warheads. The missle uses a solid propellant rocket motor, areodynamic vane controlls, and inertial guidance to navigate to an intercept point. Just prior to intercept, the missile's rate of spin is increased, the on-board radar homing seeker acquires the target, and terminal homing guidance is initiated to achieve hit-to-kill by high resolution maneuvers. The PAC-3 system upgrade, along with the PAC-3 missile, will provide an advanced anti-tactical missile capability to the current fielded system. The combat element of the Patriot Missile System is the fire unit, which consists of a phased array Radar Set (RS), an Engagement Control Station (ECS), an Electric Power Plant (EPP), an Antenna Mast Group (AMG), and eight remotely located Launching Stations (LS). The RS provides all tactical functions of airspace surveillance, target detection and tracking, and missile guidance. The ECS provides the human interface for command and control of operations. Currently, each launcher contains four ready-to-fire missiles, sealed in canisters which serve a dual purpose as shipping containers and launch tubes. Patriot’s fast reaction capability, high firepower, ability to track 50 targets simultaneously, and the ability to operate in a severe electronic countermeasures environment are features not available in previous air defense systems. The PAC-3 upgrade program will incorporate significant upgrades to the RS, ECS, and will include up to 16 advanced hit-to-kill missiles on three to four of the eight launchers per firing battery, thus increasing fire power and ballistic missile defense capabilities.

The Army is the Executive Agent for this DoD ACAT ID program which is a component of Ballistic Missile Defense Organization programs

Theater High Altitude Area Defense (THAAD)	PM, THAAD	PDRR	USD(A&T)	Dr. Gansler

The Theater High Altitude Area Defense (THAAD) system will fill the void of a theater wide area defense of tactical ballistic missile threats, including weapons of mass destruction, operating in the endo and exo atmosphere and directed against military forces and strategic geopolitical assets. The THAAD system consists of missiles, launchers, Battle Management/Command, Control, Communication, and Intelligence (BM/C3I) elements, radars, and support equipment. The missile is a hypervelocity, single stage, solid propellant booster and a unique endo-/exo-atmospheric kill vehicle (KV). The hit-to-kill technology KV, designed to destroy threat warheads, guides to the target using an infrared homing seeker. The launcher uses the Army standard Palletized Loading System (PLS) 16-ton truck with a capacity of at least 8 missile rounds on a missile pack. The HMMWV based BM/C3I centers are a set of highly robust and configurable shelters to ensure maximum flexibility on the modern battlefield. These units interface and coordinate with the Theater Air Defense C2 system and will control both the Engagement and Force Operations for the THAAD system. The BM/C3I will provide automated acquisition and identification of TBM threats, process and disseminate track data, assign weapons, monitor engagements, and guide sensor operations. The THAAD X-band phased array radar acquires the target at long ranges, tracks the target and provides in-flight updates to the THAAD interceptor prior to intercept. The radar also performs kill assessment to support the decision to commit additional interceptors or to cue lower tier systems such as the Patriot System. The THAAD System will support passive defense and attack operations by providing impact point predictions and launch point estimations. The THAAD system will be fully transportable by C141/C5/C17 military aircraft. Once in theater, the system will use Army standard movers to be highly mobile on highways and unimproved roads. These system capabilities will allow THAAD to be rapidly deployed to any theater on short notice. Current plans call for a User Operational Evaluation System (less missiles) that has been in the hands of the soldiers since 1996 to gain user input into the final system design and to provide a Commander In Chief with a complete prototype system to use in the case of an emergency by FY 2007. The Army is the Executive Agent for this DoD ACAT ID program which is one of the Ballistic Missile Defense Organization programs.

ACAT LEVEL III *Total: 1*

Program Title	***Program Mgr***	***Current Phase***	***MDA***	***MDA Name***

Joint Tactical Ground Station (JTAGS)	PM, JTAGS	PFDOS	PEO, AMD	COL(P) Urias

The Joint Tactical Ground Station (JTAGS) is a transportable information processing system which receives and processes in-theater, direct down-linked data from Defense Support Program (DSP) satellites and the follow-on Space-Based Infrared System (SBIRS). JTAGS disseminates warning, alerting and cueing information on Tactical Ballistic Missiles (TBMs) and other tactical events of interest throughout the theater using existing communication networks. JTAGS supports all Theater Missile Defense (TMD) pillars (attack operations, active defense, passive defense, and battle management/command, control, communications, computers, and intelligence (BM/C4I) and, by being located in-theater, provides the shortest sensor to shooter connectivity. P3I efforts are underway to integrate the Joint Tactical Information Distribution System (JTIDS), fuse sensor data with DSP, and upgrade JTAGS to operate with the next generation of SIBRS.

ORGANIZATION PEO, AVN *Total: 22*

ACAT LEVEL IC *Total: 3*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Threat Infrared Countermeasures / Common Missile Warning System (ATIRCM/CMWS)	PM, ATIRCM	EMD	AAE	Mr. Hoeper

Airborne countermeasure self-protection systems which detect both infrared (IR) and radio frequency (RF) missiles using advanced imaging technology and protect aircraft against IR missiles through the use of laser and lamp. This is a joint program with the Army as lead service.

Improved Cargo Helicopter (ICH) (CH-47F)	PM, CH-47F	EMD	AAE	Mr. Hoeper

As the only U.S. Army heavy lift cargo helicopter, the mission of the CH-47D Chinook/Improved Cargo Helicopter (ICH) will be to transport weapons, ammunition, equipment, troops and other cargo in general support of combat units and operations other than war. The CH-47F Chinook/ICH cockpit will be upgraded to a new electronic architecture allowing seamless interface with other systems on the digital battlefield; the airframe will be structurally modified to reduce O&S costs; the aircraft will be remanufactured to extend its service life; and the engine will be upgraded to a more powerful and reliable T55-GA-714A turboshaft engine as the result of a separate CH-47D Chinook engine upgrade program.

Longbow Apache (AH-64D)	PM, AAH	PFDOS	AAE	Mr. Hoeper

The AH-64D attack helicopter is a twin engine, four-bladed, tandem seat, aerial weapons platform. It is designed to accomplish a variety of missions in day, night, and adverse weather conditions ranging from desert heat to arctic cold. The weapon systems include the 30mm automatic cannon, 2.75 inch aerial rockets, and the Hellfire modular missile system. The aircraft is a remanufactured AH-64A Apache, modified to accept the Longbow Weapon System (LBWS). Consisting of a millimeter wave fire control radar and the associated missile with a radar seeker, the LBWS adds the capability to detect and engage targets in adverse weather and in the presence of battlefield obscurants. It also provides an fire-and-forget capability, resulting in a vast increase in both lethality and survivability. The AH-64D is currently in production. First Unit Equipped (FUE) was 1-227 Avn from 1st Cavalry Division in July, 1998. The battalion became mission-ready (Initial Operating Capability) 18 November 1998. The next battalion, the 2-101 Avn from the 101st Airborne Division, is currently being fielded.

ACAT LEVEL ID *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Comanche (RAH-66)	PM, Comanche	PDRR	USD(A&T)	Dr. Gansler

The Comanche will perform the armed reconnaissance mission for attack helicopter and air cavalry units. The Comanche will significantly expand the Army's capability to conduct reconnaissance operations in all battlefield environments, adverse weather, and during day or night operations. The Comanche will protect the force using its advanced electro-optical sensors, aided target recognition, and sensor/weapons integration. Comanche's digital communications capacity allows interface with JSTARS and other joint sensors and weapons platforms. Comanche's design for rapid rearm, refuel, and repair will provide increased operation tempo. Low observability, target recognition, and digitized communications provide the capability to conduct deep precision strike missions against time sensitive targets. The Comanche will replace three types of helicopters currently performing the armed reconnaissance mission: AH-1, OH-58, and OH-6.

ACAT LEVEL III *Total: 18*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Laser Eye Protection System	PM, ACIS	EMD	PEO, AVN	MG Snider

The objective of the program is to develop a day/night, multiple wavelength, low energy visor to address the needs of fixed and rotary wing aircrews in a fixed, multi-wavelength laser threat environment. This visor must be compatible with current Navy/Marine Corps and Army ALSE.

Advanced Threat Infrared Countermeasure Munition (AIRCMM)	PM, ATIRCM	EMD	PEO, AVN	MG Snider

The AIRCMM is an advanced aircraft infrared expendable device which is multispectral in nature and will be a replacement and/or enhancement for the standard Army M-206IR decoy. The AIRCMM is backward compatible with the M-130 General Purpose Dispenser and provides a payload identification capablity with the Advanced Expendable dispenser part of the Advanced Threat Infrared Countermeasure (ATIRCM).

AIHS Laser Eye Protection Visor	PM, ACIS	PFDOS	PEO, AVN	MG Snider

The AIHS Laser Eye Protection Visor is a two visor system that provides protection from 2 and 3 wavelengths (notches) of laser hazards. The 2 notch visor provides protection against two laser wavelengths and provides adequate ambient light transmittance to be flown at night. The 3 notch visor provides protection against three laser wavelengths. While the 3 notch visor provides additional laser protection as compared to the 2 notch visor, it is too dark to be used at night. This item is currently being fielded with the HGU-56/P Helmet.

Air Warrior (AW)	PM, ACIS	EMD	PEO, AVN	MG Snider

This program is a multi-dimensional effort, designed to enhance the aircrew warfighting capabilities by providing the airvcrew with a systems approach to integration of aircrew life support, survival equipment, and aircrew life support, survival equipment, and aircrew/aircraft interface equipment and tailorability of aircrew equipment to specific missions. MS III is planned for FY 02.

Airborne Command and Control System (A2C2S)	PM, AEC	EMD	PEO, AVN	MG Snider

The A2C2S functions as a highly mobile airborne command post when mounted in the UH-60 helicopter with auxiliary equipment, providing tactical voice, data, and imagery digitized battlefield communications both in secure and non-secure modes for corps, division, and brigade commanders. The system provides battle commanders and intercommunications facilities for up to six operators, and joint interoperability as well as maritime and air traffic control communications.

Aircrew Integrated Helmet System (AIHS)	PM, ACIS	PFDOS	PEO, AVN	MG Snider

The AIHS has the Tri-Service designation as the HGU-56/P (Head Gear unit -56th version Pilot) and will replace the existing SPH-4 and 4B helmets. It offers twice the head impact protection and comes in six sizes for fitting the smallest female (1%) through the largest male (99%) aircrew members. Fielding of the HGU-56/P continues during FY99.

Aircrew Integrated Helmet System (AIHS-P3I)	PM, ACIS	EMD	PEO, AVN	MG Snider

This program develops improvements to the AIHS HGU-56/P helmet. Preplanned improvements include lighter weight, noise reduction, and improved communications. The current P3I efforts being pursued include an Apache Magnetic Head Tracker to replace the current IHADSS helmet and a Comanche compatibility effort, and Virtual Retinal Display development.

AN/APR-48A Radar Frequency Interferometer (RFI)	PM, AAH	PFDOS	PEO, AVN	MG Snider

This radar frequency interferometer is a passive target acquisition system that provides accurate bearings to threat air defense artillery emitters. The system detects, classifies, and prioritizes radar emitters. It cues target acquisition systems, allows rapid target handover, and can provide information on the status of the detected emitter (search, acquisition, and track). The system consists of two major components; a receiver/antenna assembly and a processor. The system will use onboard displays to provide information to the aircrew.

AN/ARC-220 High Frequency (HF) Nap-of-the-Earth (NOE) Communications Radio	PM, AEC	PFDOS	PEO, AVN	MG Snider

High Frequency Nap-of-the-Earth Communications (HF NOE COMM) radios are required to satisfy critical Desert Storm operational deficiencies for long range and "over-the-hill" connectivity for both voice and data for Army aircraft. The AN/ARC-220 HF radio has been competitively procured with Automatic Link Establishment capability to replace difficult manual searches for workable frequencies, night vision compatible lighting and Electronic-Counter-Countermeasures (ECCM) capabilities.

AN/AVR-2A(V) Laser Detecting Set (LDS)	PM, ATIRCM	PFDOS	PEO, AVN	MG Snider

The AN/AVR-2A(V) Laser Detecting Set is a passive laser detecting system which receives, processes, and displays threat information resulting from aircraft illumination by lasers. The threat information is displayed on the AN/APR-39 Radar Detecting Set indicator.

AN/TPQ-45 Aircraft Survivability Equipment Trainer IV (ASET IV)	PM, ATIRCM	PFDOS	PEO, AVN	MG Snider

This trainer consists of ground based mobile threat emitters. The emitters simulate infrared and radar frequency defense systems (SA-7/14, SA-9/13, ZSU-23-4, SA-8 and C3). ASET IV presents the culmination of aircraft survivability equipment training providing realism under the "train as you fight" concept.

Aviation Mission Planning System (AMPS)	PM, AEC	PFDOS	PEO, AVN	MG Snider

The Aviation Mission Planning System is a planning/battle synchronization tool that will automate aviation mission planning tasks. It will also provide generation of mission data in either hard copy or electronic formats. The AMPS includes tactical command and control, mission planning, mission management, and maintenance management. The AMPS interfaces with the Maneuver Control System and associated networks. This interface will furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust his plan to accomplish his assigned mission.

Cockpit Air Bag System (CABS)	PM, ACIS	EMD	PEO, AVN	MG Snider

The CABS is a crash activated, inflatable protection system for application to the Army rotary wing Force Modernization fleet. It provides aircrew members improved crash survivability and reduced potential injuries and fatalities by rapid deployment during the onset of a crash, supplementing the current restraint system in a survivable crash. Joint Service application of CABS to similar aircraft is being pursued.

Doppler/GPS Navigation Set (DGNS)	PM, AEC	PFDOS	PEO, AVN	MG Snider

The DGNS provides Army Aviation utility and cargo aircraft with extremely accurate and secure location and velocity information critical to navigation. It also provides Universal Coordinate Time for communication systems and assists in situational awareness and prevention of fratricide.

Embedded Global Positioning System (GPS) Inertial Navigation System (EGI)	PM, AEC	PFDOS	PEO, AVN	MG Snider

The EGI provides Army Aviation scout and attack aircraft with extremely accurate and secure location and velocity information critical to navigation, target acquisition, fire support, assessment of enemy deployments, and logistical support. It also provides Universal Coordinated Time for communication systems and assists in situational awareness and prevention of fratricide.

Improved Data Modem (IDM)	PM, AEC	PFDOS	PEO, AVN	MG Snider

The IDM is a digital data link modem that exchanges targeting data between the various weapon systems in support of the following missions: suppression of enemy air defenses; close air support; forward air control; air combat and command. It is a Joint Service Program that will enhance digitization of the battlefield fusion of information, system integration and access to real-time fused intelligence.

M43A1(P31) Mask - Lightweight Motor Blower (LWMB)	PM, ACIS	PFDOS	PEO, AVN	MG Snider

This is a small, aircrew mounted motor blower that provides at least two (2) cubic feet per minute of airflow to the M43 series aircrew member's Chemical/Biological protective mask. This Program is making maximum use of off-the-shelf materiel and will meet electromagnetic interference and emergency egress requirements as well as all supportability, reliability, maintainability, and durability requirements of U.S. Army aircraft. Production deliveries are complete. This item will be fielded as part of the Chemical/Biological Mask which it works with.

Suite of Integrated Radio Frequency Countermeasures	PM, ATIRCM	EMD	PEO, AVN	MG Snider

The SIRFC system will provide active and passive Electronic Countermeasure (ECM) protection against Radio Frequency (RF) threats. The system is designed to meet operational requirements for a modular radio frequency countermeasure system capable of providing situational awareness, radar warning and jamming countermeasures. The system is being developed for all Army aircraft.

ORGANIZATION PEO, GCSS *Total: 20*

ACAT LEVEL IC *Total: 4*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Abrams Upgrade	PM, Abrams	EMD/PFDOS	AAE	Mr. Hoeper

The Abrams tank closes with and destroys enemy forces on the integrated battlefield using mobility, firepower, and shock effect. The M1A2 program provides the Abrams tank with the necessary improvements in lethality, survivability, and fightability required to defeat advanced threats. The M1A2 includes a Commander's Independent Thermal Viewer, an Improved Commander's Weapon Station, position navigation equipment, a distributed data and power architecture, embedded diagnostic system, improved fire control system, and a radio interface unit that allows, through the SINCGARS radio, rapid transfer of digital situational data and overlays to compatible systems on the digital battlefield. Production of new Abrams for the U.S. Army is complete. In lieu of new production, the Army is upgrading approximately 1,000 older M1 tanks to the M1A2 configuration. A multiyear procurement for 600 M1A2 upgrades was awarded in July 1996. Further M1A2 improvements, called the System Enhancement Program (SEP), are underway to enhance the tank's digital command and control capabilities and to add second generation forward looking infrared (FLIR) sensors to the thermal sights to improve the tank's fightability and lethality. M1A2 SEP tanks are scheduled to begin fielding in 3QFY00. The M1A2 SEP is in EMD. The M1A2 is in Production.

BRADLEY FVS Upgrade	PM, BFVS	EMD	AAE	Mr. Hoeper

The Bradley M2A3 Infantry / M3A3 Cavalry Fighting Vehicle (IFV/CFV) provides infantry and cavalry fighting vehicles with digital command and control capabilities, significantly increased situational awareness, enhanced lethality and survivability, and improved sustainability and supportability. The Bradley A3 Low Rate Initial Production (LRIP) in July 1997.

Family of Medium Tactical Vehicles (FMTV)	PM, MTV	PFDOS	AAE	Mr. Hoeper

The Family of Medium Tactical Vehicles (FMTV) will fill the Army's medium tactical wheeled vehicle requirements. The FMTV consists of a common truck chassis that is used for several vehicle configurations in two payload classes. The Light Medium Tactical Vehicle (LMTV) is available in van and cargo variants and has a 2 1/2-ton payload capacity. The Medium Tactical Vehicle (MTV) has a 5-ton payload capacity and consists of the following models: cargo with and without materiel-handling equipment, tractor, wrecker, and dump truck. Both the 2 ½-ton and 5-ton trucks will have a companion trailer with the same payload capacity as the truck that tows it. Van and fuel and water tanker variants of the MTV will be developed concurrent with the production of other models. The FMTV will perform line haul, local haul, unit mobility, unit resupply and other missions in combat, combat support, and combat service support units. Vehicles will operate worldwide on primary and secondary roads and trails. The FMTV will replace overaged and maintenance-intensive trucks currently in the fleet.

Sense and Destroy Armor (SADARM)	PM, ARMS	EMD/LRIP	AAE	Mr. Hoeper

SADARM is a fire-and-forget, multi-sensor, smart munition designed to detect and destroy counter-measured armored vehicles, primarily self-propelled artillery. It is effective in all weather and terrain. SADARM is delivered to the target area by 155 mm artillery projectiles. Each projectile carries two SADARM highly sophisticated submunitions. Once dispensed from its carrier, the intelligent submunition detects appropriate targets using dual-mode millimeter wave and infrared sensors. Because of the multi-mode sensor suite, the submunition is equally effective against desert background and winter snow. It fires a highly lethal explosively formed penetrator through the top of the target. SADARM is a gun-hardened submunition with the capability to be dispensed from a variety of carriers. SADARM was approved for Low Rate Initial Production following a Milestone III Defense Acquisitioin Board in Mar 1995.

ACAT LEVEL ID *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*

Crusader: Advanced Field Artillery System / Future Armored Resupply Vehicle (AFAS/FARV)	PM, Crusader	PDRR	USD(A&T)	Dr. Gansler

Crusader is an indirect fire support "system of systems" consisting of a self-propelled howitzer and a dedicated resupply vehicle providing support fires to maneuver forces on the future battlefield. The howitzer is a 155mm Self Propelled Howitzer (SPH) system that provides a significant increase in artillery survivability, lethality, mobility, and operational capability and effectiveness through the use and integration of advanced technology in its subsystems and combat components. These technologies include: the modular artillery charge system, the autosettable multi-option fuze, and automated ammunition handling system. The SPH will deliver unprecedented firepower capabilities at extended ranges. The armored Resupply Vehicle (RSV) will provide the foundation for supply of ammunition and fuel for the SPH. Inserting high-payoff technologies in robotics, automation, expert systems, and vehicle electronics, the RSV will provide the necessary ammunition to meet expected firing rates; meet the goals for autonomous operations; and capitalize on cost and operational advantages of component commonality. These systems will displace the M109A6 Paladin and M992A2.

ACAT LEVEL II — *Total: 2*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
120mm M829E3 APFSDS-T	PM, TMAS	EMD	PEO, GCSS	MG Michitsch

The M829E3 is a kinetic energy round being developed to counter explosive reactive armor advancements expected to be fielded early in the next century. Advancements in propulsion and penetration are key elements of this program.

Medium Tactical Vehicle Replacement Program (MTVR) (USMC)	PM, MTV	EMD	PEO, GCSS	MG Michitsch

The MTVR replaces the existing medium tactical motor transport fleet of M809/M939 series trucks with cost-effective, state-of-the-art, technologically-improved trucks. Major improvements include a new electronically controlled engine/transmission, independent suspension, Central Tire Inflation System (CTIS), antilock brakes, traction control, corrosion control, and safety/ergonomic features. This program is managed by the Army for the Marine Corps.

ACAT LEVEL III — *Total: 13*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
120mm M829A2 APFSDS-T	PM, TMAS	PFDOS	PEO, GCSS	MG Michitsch

The M829 is the world's most lethal kinetic energy round. It is the Abrams Tank's primary anti-armor cartridge. It incorporates thick walled graphite composite sabots, high density stick propellent, and a depleted uranium penetrator.

120mm M830A1 Multi-Purpose/HEAT Cartridge	PM, TMAS	PFDOS	PEO, GCSS	MG Michitsch

This round utilizes a sub-calibered saboted warhead which results in increased velocity, shortened time of flight, and higher hit probability. It represents a major breakthrough in HEAT ammunition in terms of range and performance. The M830A1 has an anti-helicopter capability.

155mm M795 High Explosive	PM, ARMS	PFDOS	PEO, GCSS	MG Michitsch

The M795 Projectile consists of 28.3 pounds of TNT explosive loaded into a high fragmentation steel body assembly. The projectile can use a variety of fuzes (point detonating, mechanical/electronic time and proximity). It will be used for conventional fire support and will supplement the currently stockpiled 155mm HE M107. It provides greater range and lethality than the M107 and will be used as a registration round for the M483A1 family of conventional munitions. The M795 is in production.

Advanced Tank Armament System	PM, TMAS	PDRR	PEO, GCSS	MG Michitsch

This program is developing and integrating state of the art armament technologies for the Abrams tank and other armored systems, including the Future Scout and Cavarly Vehicle. These technologies, including improved cannon and fire control, will give these systems the ability to see, hit and kill targets at extended ranges and maintain lethality overmatch over the threat.

Bradley Fire Support Vehicle (BFIST)	PM, BFVS	EMD/LRIP	PEO, GCSS	MG Michitsch

The BFIST provides an integrated Bradley-based fire support platform that allows company fire support teams and battalion/brigade fire support officers to plan, coordinate, execute, and direct timely, accurate indirect fires.

Bradley Linebacker	PM, BFVS	PFDOS	PEO, GCSS	MG Michitsch

The M6 Bradley Linebacker is a dedicated Forward Area Air Defense (FAAD) for the heavy maneuver forces that provides equivalent signature, survivability, and mobility. The system can engage and defeat a variety of threat platforms including rotary wing aircraft, unmanned aerial vehicles, cruise missiles, fixed wing aircraft, and other air defense systems. The Linebacker is a BFVS A2 ODS, modified by replacing the TOW launcher with a four-missile STINGER launcher. This modification provides the crew with the capability of conducting a ground-to-air engagement while remaining under armor protection. The Linebacker also incorporates the Forward Area Air Defense Command and Control System (FAADC2) software on a Handheld Terminal Unit (HTU). By integrating GPS and FAADC2 the Linebacker provides an automated Slew-to-Cue function.

Command and Control Vehicle	PM, BFVS	EMD	PEO, GCSS	MG Michitsch

The Command and Control Vehicle (C2V) is a fully tacked, armored system that will provide battalion-through-corps battle staffs a highly mobile, survivable, and reconfigurable platform capable of hosting current and future Command, Control, Communications, Computer, and Intelligence (C4I) systems. TheC2V integrates the following components: a modified M993 carrier, BFV 600 HP engine, TEC transmission, 10 meter mast system, primary power unit, armored enclosure, individual/collective Bio-Chem system, environmental control system, 1553 data bus, power distribution system, and a reconfigurable C4I Mission Equipment Package (MEP).

CTG, 25mm, M919	PM, TMAS	PFDOS	PEO, GCSS	MG Michitsch

The M919 is an enhanced armor piercing cartridge with increased penetration and range performance over older armor piercing cartridges that incorporates improved kinetic energy (KE) penetrator materials, consolidated propellants and lower parasitic mass components.

Modular Artillery Charge System (MACS)	PM, Crusader	EMD	PEO, GCSS	MG Michitsch

The Modular Artillery Charge System (MACS) is intended for use with fielded 155mm field artillery systems equipped with M199 and M284 39 caliber cannons and the XM297 cannon under development for use on Crusader. The MACS includes two different types of charge increments - the XM231 designed to achieve ranges in zones 1 and 2, and the XM232 designed to achieve ranges in zones 3-6. Each increment contains propellant, an ignition system, and performance enhancing additives that are loaded in a combustible case.

Multi-Option Fuze for Artillery (MOFA)	PM, Crusader	EMD	PEO, GCSS	MG Michitsch

MOFA will provide proximity, time delay and point detonation functions for 105mm, 155mm and bursting projectiles.

Projectile, 155mm Extended Range Dual Purpose Improved Conventional Munition (XM982)	PM, ARMS	EMD	PEO, GCSS	MG Michitsch

The XM982 is an extended range Dual Purpose Improved Conventional Munition (DPICM) 155mm artillery projectile. It will be compatible with all current and future 155mm artillery systems in the U. S. inventory. The XM982 will extend the range of the M198, M109A5, 155mm Paladin (M109A6), and the Light Weight Howitzer to approximately 37 kilometers. The XM982 with the Modular Artillery Charge System (MACS) extends the Crusader range to 47 kilometers. Survivability is increased by allowing greater stand-off from threats and faster defeat of potential threats.

Striker	PM, BFVS	EMD/LRIP	PEO, GCSS	MG Michitsch

The M707 Striker performs 24-hour terrain surveillance, target location, acquisition, and designation in heavy and light divisions. The system operates as an integral part of the brigade recon fight, providing Combat Observation Lasing Teams (COLTs) with fire support mission planning and execution. Striker consists of an M1025A2 armored HMMWV integrated with a Mission Equipment Package (MEP) that includes: Ground/Vehicular Laser Locator Designator (G/VLLD), AN/TAS-4B night sight, Handheld Terminal Unit (HTU), Lightweight Computer Unit (LCU) that hosts Forward Observer System (FOS) Software, and Inertial Navigation System (INS).

Towed Artillery Digitization (TAD)	JPM-LW155	PDRR	PEO, GCSS	MG Michitsch

The primary element of the TAD program is a "Digital Fire Control System" (DFCS). Other elements of the TAD program may include laser ignition (or other primer-less ignition system), powered or power assisted ramming, an ammunition handling device, and powered or power assisted elevation and/or deflection drives. The TAD program will have application to both Army and Marine Corps XM777 (LW155) howitzers, and may also be applied in whole or in part to the M198 howitzer, the M119 howitzer, and the Army's Future Direct Support Weapon System (FDSWS). The DFCS shall be a fully integrated digital fire control system providing position location, navigation, ballistic computation, muzzle velocity measurement, receiving and applying meteorological data, multiple fire mission storage and sequencing, system command and control functions, digital communications, electronic crew controls and displays, and some level of situational awareness.

ORGANIZATION PEO, IEW&S *Total: 23*

ACAT LEVEL IC *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Sentinel	PM, Sentinel	PFDOS	AAE	Mr. Hoeper

The Sentinel system consists of the High Mobility Multi-purpose Wheeled Vehicle Group and the Antenna Transceiver Group mounted on a one-ton, wide-track trailer. Sentinel provides critical air surveillance of the forward areas; automatically detects, tracks, classifies, identifies, and reports target data to Short Range Air Defense weapon systems and battlefield commanders via the FAADC2I data link or directly from the Sentinel using the EPLRS or SINCGARS data radios.

ACAT LEVEL ID *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Joint Surveillance and Target Attack Radar System Common Ground Station (JSTARS CGS)	PM, Joint STARS	EMD	USD(A&T)	Dr. Gansler

The CGS is a mobile, tactical, multi-sensor ground station that receives, displays, processes, and disseminates targeting battle management and intelligence information to all echelons. In addition to Joint STARS radar data, the CGS is now capable of receiving and displaying Unmanned Aerial Imagery as well as signals intelligence data via an integrated Joint Tactical Terminal. Two previous variants, a Medium Ground Station Module (MGSM) mounted on a 5-ton truck and a light version (LGSM) mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV) will be decommissioned or upgraded to the CGS in CY99. The CGS is a HMMWV-mounted shelter system that features COTS hardware and software and represents significant cost savings compared to the GSMs. The CGS has an aggressive P3I program to keep pace with the improvements to the airborne Joint STARS platform, expand interoperability and improve exploitation of Intelligence, Surveillance and Reconnaissance data.

ACAT LEVEL II *Total: 4*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Battlefield Combat Identification System (BCIS)	PM, CID	EMD	AAE	Mr. Hoeper

BCIS is a millimeter wave question and answer friend identification system to reduce battlefield fratricide.

Second Generation FLIR, Horizontal Technology Integration (HTI)	PM, FLIR	EMD/LRIP	PEO, IEW&S	MG Gust

The objective of this program is to select, develop and demonstrate a greatly increased capability to fight during periods of reduced visibility. The 2nd Gen FLIR promises to provide better resolution and increased clarity at greater ranges than existing systems and will allow combined arms forces to see the same battlespace while achieving cost reductions through commonality and potential economies of scale. The 2nd Gen FLIR will be applied to the Bradley Fighting Vehicle, M1A2 Abrams and the Long Range Advanced Scout Surveillance System (LRAS 3).

Tactical Endurance Synthetic Aperture Radar (TESAR)	PM, TESAR	PFDOS	Air Force AE	Mr. Delaney

Tactical Endurance Synthetic Aperture Radar (TESAR) is an imagery system designed for use on unmanned aerial vehicles.

Tactical Unmanned Aerial Vehicle (TUAV)	PM, TUAV	PDRR	AAE	Mr. Hoeper

The TUAV is the maneuver commander's "dominant eye" focusing on the close battle providing targeting, situation development and battle damage assessment. TUAV will replace manpower-intensive and high-risk front line monitoring systems such as remote sensors and ground-based radars. With its real-time video capability, the TUAV will give tactical ground commanders the capability to visualize more of the battlefield than ever before. Milestone I was approved on 7 Apr 99.

ACAT LEVEL III *Total: 16*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Quickfix (AQF)	PM, GBCS/AQF	EMD	PEO, IEW&S	MG Gust

AQF is a heliborne electronic attack, signals intelligence and emitter targeting system, currently in LRIP.

Aerial Common Sensor	PM, ACS	CE	PEO, IEW&S	MG Gust

Aerial Common Sensor provides dedicated, corps-level, multi-disciplined intelligence, surveillance and reconnaissance (ISR) support for situation awareness, targeting and force protection under full range of operational scenarios. Combines the functionality of GRCS and ARL into single platform. This program is expected to be raised to ACAT I level.

Airborne Reconnaissance Low (ARL)	PM, ACS	PFDOS	PEO, IEW&S	MG Gust

The ARL is a multifunction airborne day/night reconnaissance asset initially designed for low intensity conflict/counter narcotics/Operations Other Than War applications.

Aviator's Night Vision Imaging System Heads Up Display (ANVIS HUD)	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Heads Up Display (HUD) is a modification to the GEN III Aviator's Night Vision Imaging System which allows crew members to spend more time looking through their windshields and less time looking down at their instrument panels. The HUD places critical aircraft symbology as an overlay to their goggle image.

Ground Based Common Sensor (GBCS) / PROPHET	PM, GBCS/AQF	EMD	PEO, IEW&S	MG Gust

GBS consists of two parts:

Ground Based Common Sensor - Heavy

The Ground Based Common Sensor - Heavy is a vehicle mounted (Bradley variant) signals-intercept and precision emitter-location system that supports Armored and Mechanized Infantry Divisions.

Ground Based Common Sensor - Light

The Ground Based Common Sensor - Light is a vehicle mounted (HMMWV) signals-intercept and precision emitter location system that supports Light Divisions.

Joint Tactical Terminal (JTT)/Common Integrated Broadcast Service-Modules (CIBS-M)	PM, JTT/CIB	EMD	PEO, IEW&S	MG Gust

The Joint Tactical Terminal is part of the Integrated Broadcast Service link to battle managers, intelligence centers, air defense, fire support and aviation nodes across all services. It is a family of special application UHF line of sight/sattelite communications secure intelligence dissimenation reporting systems for deployment with tactical untis. The JTT allows users to exploit intelligence broadcast networks which include TRIXS, TIBS, TRAP, TADIXS-B. The equipment can be mounted in fixed and rotary wing aircraft as well as fixed or mobile ground platforms.

Lightweight Laser Designator/Rangefinder (LLDR) AN/PED-1	PM, NV/RSTA	EMD	PEO, IEW&S	MG Gust

LLDR has a day camera, Forward Looking Infrared (FLIR) thermal sensor, laser rangefinder, digital compass/vertical angle measurement device, global positioning system with video/digital outputs and a laser target designator for day/night acquisition, precise location and designation for engagement by a variety of munitions.

Lightweight Video Reconnaissance System (LVRS) AN/PVH 1&2	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

LVRS outstations capture still images in day or night and transmit those images through a military radio to a LVRS basestation.

Long Range Advance Scout Surveillance System (LRAS3)	PM, FLIR	PDRR	PEO, IEW&S	MG Gust

LRAS3 provides scouts with a long range day/night target acquisition and observation capability. It uses a Second Generation FLIR, laser range finder and global positioning system.

Monocular Night Vision Device (MNVD) AN/AVS-14	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

MNVD is a small tubular shaped single eye piece lens assembly with a state-of-the-art image intensification for amplifying low levels of starlight/moonlight for night operations.

Night Vision Systems--Mini Eyesafe Laser Infrared Observation Set (MELIOS)	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

Mini Eyesafe Laser Infrared Observation Set (MELIOS) is designed to meet all ranging requirements of the infantry and selected requirements of other branches and services out to ranges of 10KM with plus or minus 5M accuracy.

Night Vision Thermal Systems--The Driver's Vision Enhancer (DVE)	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Driver's Vision Enhancer (DVE) is a passive thermal imaging system designed to provide drivers of tactical wheeled vehicles with the capability to continue normal driving operations in all ambient light levels and in the presence of natural and man-made obscurants. DVE is currently in limited procurement.

Night Vision Thermal Systems--Thermal Weapon Sight (TWS)	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

Thermal Weapon Sight (TWS) is a class of low cost, lightweight, infrared imaging devices of medium to high resolution to be used for fire control of individual and crew served weapons during both daylight and darkness.

Third Generation Night Vision Systems--The Night Vision Goggle	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Night Vision Goggle is an individual, lightweight, high performance passive, third generation image intensifier system.

Third Generation Night Vision Systems--The Sniper Day/Night Sight	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Sniper Day/Night Sight provides snipers using the M24 rifle the capability to acquire and engage targets at night using a third generation image intensifier. This system converts to either day or night use by the flip of a switch that alternates as needed between a day sniper scope or the image intensifier for night viewing.

Third Generation Night Vision--The Aviator's Night Vision Imaging System (ANVIS)	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Aviator Night Vision Imaging System provides aviators with night vision capabilities.

ACAT LEVEL IV *Total: 1*

Program Title	***Program Mgr***	***Current Phase***	***MDA***	***MDA Name***
Guardrail / Common Sensor (GR/CS), System 1, 2 and 4	PM, ACS	PFDOS	PEO, IEW&S	MG Gust

GR/CS System 1, 2 and 4 is a corps-level SIGINT (COMINT & ELINT) collection and precision targeting system.

ORGANIZATION PEO, TAC MSL *Total: 9*

ACAT LEVEL IC *Total: 4*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Anti-Tank Weapon System -- Medium (Javelin)	PM, Javelin	PFDOS	AAE	Mr. Hoeper

Javelin is a man-portable, anti-tank system developed for the U. S. Army and U. S. Marine Corps. The system is highly lethal against tanks with conventional and reactive armor. Javelin has two major tactical components; a reusable Command Launch Unit (CLU) and a missile sealed in a disposable Launch Tube Assembly. The CLU incorporates an integrated day/night sight and provides target engagement capability in adverse weather and countermeasure environments. The CLU may also be used in the stand-alone mode for battlefield surveillance and target detection. The Javelin system weighs less than 49.5 lb. and has a maximum range in excess of 2,500 meters. Javelin's key technical feature is the use of fire-and-forget technology which allows the gunner to fire and immediately take cover. Additional special features are the top attack and/or direct fire modes (for targets under cover), integrated day/night sight, advanced tandem warhead, imaging infrared seeker, target lock-on before launch and soft launch. Soft launch allows Javelin to be fired safely from enclosures and covered fighting positions increasing gunner survivability. Javelin replaces the DRAGON.

Army Tactical Missile System -- Anti-Personnel Anti-Materiel BLOCKS I/IA (ATACMS--APAM)	PM, Imp ATACMS	PFDOS	AAE	Mr. Hoeper

The Army Tactical Missile System (ATACMS) provides long-range, surface-to-surface fire support for U.S. Army Corps and Division operations. The ATACMS Blocks I and IA are ground-launched missile systems consisting of a surface-to-surface guided missile with an anti-personnel/anti-materiel (APAM) warhead. The ATACMS with APAM attacks soft targets at extended ranges. Targets include surface-to-surface missile sites, air defense systems, logistics elements, and command, control, and communications complexes. The ATACMS Block IA, with enhanced Global Positioning System (GPS) accuracy, has approximately twice the range of the ATACMS Block I. The contractor completed deliveries of the Block I missile in July 1997. Block I saw combat action in Southwest Asia during Operation Desert Storm effectively destroying high priority targets. Block IA will begin fielding in FY98, and retrofit of existing launchers to Block IA capability will occur simultaneously with missile fielding.

Longbow HELLFIRE AGM-114L	PM, Air to Grnd Msl Systems (AGMS)	PFDOS	AAE	Mr. Hoeper

The Longbow HELLFIRE missile is a fire-and-forget missile which uses radar-aided inertial guidance. It is part of the Apache AH64D Longbow system which also includes a mast-mounted millimeter wave fire control radar with associated electronics designed to greatly increase the survivability of the host helicopter. LBHF will provide the capability to conduct battle both day and night, in adverse weather conditions, and with battlefield obscurants present. The Longbow HELLFIRE missile utilizes millimeter wave radar-aided inertial guidance to provide a lock-on before launch (LOBL) or lock-on after launch (LOAL) capability, depending on target range and velocity. Starting with the FY97 buy, an Insensitive Munitions Warhead was incorporated which improves survivability. It is planned that Longbow HELLFIRE missile also will be used on the Comanche. Longbow HELLFIRE is 69.2 inches in length and weighs 108 lbs. Weapon range is approximately 8km.

MLRS Upgrade	PM, MLRS	EMD/PFDOS	AAE	Mr. Hoeper

The Multiple Launch Rocket System (MLRS) is an artillery weapon system that supplements cannon artillery fires by delivering large volumes of firepower in a short time against critical, time-sensitive targets such as counterbattery fire and suppression of enemy air defenses, light materiel, and personnel targets. The basic warhead carries improved conventional submunitions. However, the MLRS is capable of supporting and delivering all of the MLRS Family of Munitions (MFOM) including the Army Tactical Missile System (Army TACMS) weapons. Growth programs are under way to extend the range of the rocket system and to upgrade the fire control and launcher mechanical systems. The U.S. initial operational capability for MLRS was achieved in 1983. Current plans for improvement of the system include the M270A1 upgrade starting in FY98. This upgrade consists of the Improved Fire Control System (IFCS) and the Improved Launcher Mechanical System (ILMS) modifications. The IFCS will mitigate electronic obsolescence, and provide growth for future weapon systems. The ILMS will provide rapid response to time-sensitive targets by reducing the aiming time by 70 percent and the reload time by 50 percent. The IFCS and the ILMS are in the Engineering and Manufacturing Development Phase.

ACAT LEVEL ID — *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Army Tactical Missile System -- Brilliant Anti-Armor Submunition (ATACMS-BAT)	PM, ATACMS-BAT	PFDOS	USD(A&T)	Dr. Gansler

The Army Tactical Missile Systems (Army TACMS) provides long-range, surface-to-surface fire support. The Army TACMS Blocks I and IA are ground-launched missile systems consisting of a surface-to-surface guided missile with an anti-personnel/anti-materiel (APAM) warhead. The Army TACMS with APAM is used to attack soft targets at extended ranges. Army TACMS missiles are fired from the modified M270 launcher and are capable of engaging targets at ranges well beyond the capability of existing cannons and rockets. The Army TACMS Block 1A, with enhanced GPS, has approximately twice the range of the Army TACMS. The Army TACMS block II is a modification of the currently fielded and combat proven Block I missile family. The Block II will deliver 13 BAT or P3I BAT submunitions deep into enemy territory where they will autonomously attack and destroy numerous high-payoff targets. The Army TACMS Block IIA is an extended range version of the Block II missile and will carry 6 P3I BAT submunitions to significantly extended ranges.

ACAT LEVEL II — *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
High Mobility Artillery Rocket System (HIMARS)	PM, HIMARS	*	PEO, Tac Msl	BG Holly

HIMARS will is a C-130 transportable, wheeled, indirect fire rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) Family of Muntions (MFOM). HIMARS is designed to carry a single Launch Pod Container (LPC) containing six rockets, or one Guided Missile Launching Assembly (GMLA) containing one Army Tactical Missile system (ATACMS) missile. The LPC/GMLA is carried on the chassis of the Army's Family of Medium tactical Vehicles (FMTV) 6x6 all-wheel drive M1096 Series, 5-ton truck. The HIMARS will provide tactical and operational fire support during both offensive and defensive operations, and be used to engage and defeat tube and rocket artillery, air defense concentrations, trucks, light armor and personnel carriers, as well as support troop and supply concentrations.

* Program is currently an Advanced Technology Demonstration (ATD).

ACAT LEVEL III — *Total: 3*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*

Extended Range Rocket (ER-MLRS)	PM, Precision Guided Munitions	PFDOS	PEO, Tac Msl	BG Holly

ER-MLRS is a free-flight, area fire, artillery rocket designed to complement the capabilities of the MLRS. Its mission is to engage targets beyond the range of the existing MLRS rockets up to a range of approximately 45 kilometers. Greater range is obtained by lengthening the motor section to accommodate more propellant and incorporating the M451 Remote Settable Fuze which allows higher altitude flight. Accuracy is improved through the use of no-load detent bolts in the launch pods to reduce launch tip off errors and a launcher-mounted meteorological sensor to provide updated wind data to the fire control computer. The shortened payload section will house new XM85 Dual Purpose Improved Conventional Munition grenades equipped with electronic self-destruct fuzes to reduce hazardous duds for improved maneuver force safety. Current guidance is to produce a limited number of ER-MLRS until the Guided MLRS Rocket enters production in FY02.

Guided MLRS Rocket (GMLRS) - XM30	PM, Precision Guided Munitions	EMD	PEO, Tac Msl	BG Holly

Guided MLRS (GMLRS) is a major upgrade to the M26 series MLRS rocket with the objective of integrating a Guidance and Control (GMC) package and a new rocket motor to achieve greater range and precision accuracy. The improvement in accuracy will reduce the number of rockets required to defeat targets to maximum range (approximately 60 km), reduce the number of launchers required per fire mission, and directly contribute to reducing the logistics burden. Guidance will be performed by a low-cost, tactical-grade Inertial Measurement Unit (IMU) designed to be aided by an optional GPS receiver. Control will be accomplished by four canards driven by electromechanical actuators. Required accuracy will be met with the IMU in an independent mode. GPS is not mission-essential, but provides a further increase in accuracy when used in conjunction with the IMU. The precision provided through the addition of the guidance and control package reduces the payload to 400+ grenades.

Improved Target Acquisition System (ITAS)	PM, ITAS	EMD	PEO, Tac Msl	BG Holly

ITAS is a technology insertion program utilizing 2nd GEN FLIR technology to upgrade the current HMMWV/ground mounted TOW Target Acquisition and Fire Control subsystems. The ITAS will provide improved target detection and acquisition range, improved probability of hit and enhanced fire control capabilities. These will upgrade the anti-armor capabilities of light forces using the TOW system, allowing the Army to own the night and providing a bridge for compatibility with the next generation missile. The ITAS design provides growth potential for digitized applications and a bridge to the Follow-On To TOW (FOTT) missile. On 28 Sep 98, First Unit Equipment was executed to the 82d Airborne Division. Milestone III decision is programmed for May 1999.

ORGANIZATION SMDC *Total: 2*

ACAT LEVEL II *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)	PM, JLENS	PDRR	AAE	Mr. Hoeper

JLENS elevated sensors provide Over-the-Horizon (OTH) wide area surveillance and precision tracking (Fire Control) data to support the primary mission area of Land Attack Cruise Missile Defense (LACMD) through the use of the Air-Directed Surface-to-Air-Missile (ADSAM) concept and Combat Identification. Additionally, the system will support secondary mission areas of Attack Operations (Ground Moving Target Indicator) and Battlefield Communications.

ACAT LEVEL III *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Ballistic Missile Targets Joint Program Office	PM, BMT JPO	*	SMDC	LTG Costello

As an integral part of the US Army Space and Missile Defense Command (USASMDC), the BMTJPO develops and provides ballistic missile targets for testing of critical Army, Navy, and Air Force missile defense systems and technology programs. The BMTJPO serves as the executing agent for the Ballistic Missile Defense Organization's (BMDO) Consolidated Targets Program. As such, it manages requirements analysis, acquisition, technical development, instrumentation, integration, and launch of all ballistic missile targets in support of Joint-Service theater and national missile defense requirements. The consolidated targets suite provides highly complex targets to support Major Defense Acquisition Programs (MDAP) such as Theater High Altitude Area Defense (THAAD), Patriot, Navy Theater Wide, Navy Area Wide, USAF Airborne Laser, and Ground Based Interceptor (GBI). It encompasses the use of a wide variety of targets necessary to replicate threat missile signatures for use as Theater Missile Defense targets, and many reentry vehicles, replicas, decoys, and penetration aids dispensed from the Multi-Service Launch System (MSLS) or the Strategic Target System (STARS) boosters for National Missile Defense targets. This office also provides close coordination of Army missile defense technologies to ensure that advancements in sensors, weapons, and other technologies are integrated into developing target systems.

* Due to the nature of the program, systems are in various acquisition phases.

ORGANIZATION TARDEC *Total: 4*

ACAT LEVEL II *Total: 3*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Grizzly (Complex Obstacle Breacher)	PM, CMS	EMD	DSA, TACOM	COL(P)

The Grizzly is a combat mobility system capable of conducting in-stride breaches of rapidly emplaced complex linear obstacles. Grizzly incorporates countermine and counterobstacle capabilities in an M1 Abrams chassis-based system with agility and survivability comparable to the maneuver force. Grizzly features a full-width Mine Clearing Blade with automatic depth control. a Power Driven Arm, and an advanced vehicle architecture compatible with future digital battlefield command and control.

HERCULES (Heavy Recovery Vehicle)	PM, CMS	PFDOS	DSA, TACOM	COL(P)

The HERCULES is a full-tracked armored vehicle developed to support battlefield recovery of heavy tanks and other tracked combat vehicles (including future heavy combat vehicle systems). HERCULES is based on the M88 recovery vehicle chassis but incorporates significant improvements to towing, winching, lifting, and braking characteristics to allow it to conduct the primary mission of single vehicle recovery of the Abrams tank fleet.

Wolverine (Heavy Assault	PM, CMS	EMD/LRIP	DSA, TACOM	COL(P)

The Heavy Assault Bridge (HAB) is a 26 meter (85.3 ft.) Military Load Class 70 bridge transported on an M1A2 Abrams Tank Chassis. The bridge is capable of spanning gaps up to 24 meters on unprepared abutments. It is launched under armor within five minutes and can be retrieved from either end in ten minutes. The HAB is operated by two Combat Engineers and is employed by combined arms task forces in both offensive and defensive operations. Its mission is to provide gap crossing capability for heavy maneuver forces. It is planned to support Abrams Tanks and Bradley Fighting Vehicles and is comparable with these systems in mobility and survivability characteristics.

ACAT LEVEL Pre-MDAP *Total: 1*

Program Title	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Future Scout and Cavalry	PM, CMS	CE	TBD	

Vehicles such as the High Mobility Multipurpose Wheeled Vehicle and Cavalry Fighting Vehicle which currently perform the scout mission were not initially designed to be scout vehicles. The US and UK are pursuing a joint demonstration program to provide the foundation for a Future Scout & Cavalry System that is operationally ready, survivable, mobile, deployable, lethal, and able to perform this mission. This ATD will develop the necessary interfaces to ensure compatibility among the scout technologies. The US/UK cooperative strategy calls for the competitive award of two ATD contracts. The demonstrators will be sufficiently robust so that the traditional demonstration and validation phase can be omitted, saving time and dollars.

SAAL-ZS Systems 415 Total Programs

Sorted By Organization PM Reports To, Then By Program Title

Organizations Included:

ASA(ALT) (i.e., Direct Reporting PMs) PEOs:

CG, SBCCOM AMD

CG, STRICOM AVN

DAR, SBCCOM GCSS

DSA, AMCOM IEW&&S

DSA, TACOM TAC MSL

JPO, Bio Def SMDC

TARDEC

Organizations Not Included:

CG, IOC PEOs:

CG, MTMC C3S

COE IS

DCSOPS STAMIS

DSA, CECOM USAMRMC

ORGANIZATION ASA(ALT) *Total: 2*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Chemical Demilitarization	IC	PM, Chemical Demilitarization	EMD/PFDOS	AAE	Mr. Hoeper

The Program Manager for Chemical Demilitarization (PMCD) is the executive agent responsible for destroying all U.S. chemical warfare related materiel while ensuring maximum protection of the public, personnel involved in the destruction effort, and the environment. Public Laws and the Chemical Weapons Convention (CWC) mandate destruction of the U.S. chemical agents and weapons by 29 April 2007. The Chemical Demilitarization Program encompasses three subordinate projects: Chemical Stockpile Disposal Project (CSDP), Alternate Technologies and Approaches Project (ATAP), Non-stockpile Chemical Materiel Project (NSCMP), and Cooperative Threat Reduction (CTR). The CSDP is responsible for destroying America's stockpiled chemical weapons, stored at eight sites in the continental United States and at Johnston Island in the Pacific Ocean. Operating incineration-based chemical demilitarization facilities exist at Johnston Island and Toelle, Utah. Chemical demilitarization facilities are under construction at Umatilla, Oregon; Anniston, Alabama; and Pine Bluff, Arkansas. The ATAP is responsible for the necessary activities to pilot test two neutralization-based processes for the disposal of distilled mustard agent and nerve agent VX stored at Aberdeen Proving Ground, Maryland, and Newport Chemical Depot, Indiana, respectively. The NSCMP mission is to provide centralized management and direction to the Department of Defense for the disposal of non-stockpile chemical materiel. Five primary mission areas of the NSCMP are disposal of binary chemical weapons, destruction of former production facilities, disposal of miscellaneous chemical warfare materiel, disposal of recovered chemical weapons, and identification and disposal of buried chemical weapons. CTR, funded through the Defense Threat Reduction Agency (Nunn-Lugar Appropriation), is responsible for assisting the Russian Federation in their chemical weapons destruction program. The two primary missions are establishing the first Chemical Weapons Destruction Facility in Russia and a Central Chemical Weapons Destruction Analytical Laboratory.

Joint Tactical Radio System (JTRS)	Pre-MD AP	PM, JTRS	*	USD(A&T)	Dr. Gansler

The JTRS program is establishing an industry developed and endorsed, open standard architecture that will permit the acquisition of a family of programmable, digital communications systems that are modular, scalable, and extendable. JTRS will be backwards compatible with legacy tactical radio systems and will provide a foundation for achieving joint interoperability. Because of the open standard, JTRS will be cost-effectively upgradeable via software to meet future requirements. The objective is to acquire JTRS systems as replacements for all of DoD's radio inventory and personal communications equipment. Acquisition will begin by 2002, with initial operational capability for several applications possible by 2003.

*This system is being developed in steps and cannot be placed in phases at the present time.

ORGANIZATION CG, SBCCOM *Total: 4*

Program Title	*ACAT Level*	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Integrated Collective Protection System (ACIPS)	IV	System Manager	PDRR	Acq Ex,	Mr. McKivrigan

The ACIPS is an advanced filtration system integrated with environmental control and exportable power source for vans and shelters to provide collective protection. It has the capability of being integrated in more than one configuration to provide protection to different tactical vehicles (heavy, XM31; medium, XM32; light, XM33).

Chemically Protected Deployable Medical Systems (CP DEPMEDS)	IV	System Manager	EMD	DAR SBCCOM	COL(P) Mangual

The CP DEPMEDS is a kit that will be fielded with select DEPMEDS hospitals to convert the hospital into a fully operational environmentally controlled, collectively protected medical treatment facility. The CP DEPMEDS will provide a clean, toxic free environmentally controlled patient treatment area maximizing the use of existing equipment. The following components are required to be added to existing DEPMEDS hospitals to provide a fully operational collectively protected field hospital: M28 Collective Protection Equipment (CPE), CB ISO Shelter Seals, CB Protected Water Distribution System, CB Protected Latrines, Low Pressure Alarms and CB Protected Environmental Control Units (ECUs) and Heaters. CP DEPMEDS is a Multi-Service program with the Air Force and is fully supported by the OSD-CB Defense program. The system is scheduled for MSIII decision in 2QFY00.

Land Warrior Program	II	PM, Land Warrior	EMD	AAE	Mr. Hoeper

Land Warrior is a first generation, modular, infantry fighting system providing combat overmatch to Infantry soldiers. Land Warrior integrates night vision, information and communications technologies to improve the lethality, survivability, command and control, mobility, and sustainment of all infantry soldiers on the digitized battlefield. Land Warrior also has an associated Science and Technology effort called "Force XXI Land Warrior" to provide advanced components for technology insertion.

M48 Chemical-Biological Apache Aviator's Mask/M49 Chemical-Biological General Aviator's Mask	IV	System Manager	PFDOS	Acq Ex,	Mr. McKivrigan

CBDCOM (ERDEC) has tested and validated a man-mounted motor blower for use with the M48/M49 masks. The motor blower is lighter and has a better operating time than the M43/M43A1's motor blower. ERDEC is purchasing motor blowers, hoses, swivels, and straps to retrofit existing M43A1 facepieces to the M48 and M49 configuration. Apache aviator use the M48 mask while the general aviators (all helicopters except Apache) use the M49 mask. The mask provides protection against nuclear, Biological, and chemical agents.

ORGANIZATION CG, STRICOM *Total: 16*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Aerial Targets	III	PM, ITTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The Aerial Targets program provides realistic surrogate or acquired threat high performance, multi-spectral aerial targets which fully stress the latest air defense and air-to-air weapon systems during Test & Evaluation (T&E). This program encompasses a family of rotary and fixed wing targets, full-scale, miniature and sub-scale targets, tactical ballistic targets, ancillary devices and remote control systems. Program also includes a suite of virtual models for selected aircraft types.

Air and Command Training System (ACTS)	III	PM, ACTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The ACTS program consists of various high fidelity system and non-system weapons simulators, combat mission simulators, Synthetic Flight Training Systems (SFTS), simulators, part-task and maintenance trainers, as well as force-on-force Tactical Engagement Systems (TES) which support training of Aviation, Air Defense, Intelligence and Electronic Warfare, Command and Control and Air Traffic Control in both virtual and live environments.

Army Threat Simulators	III	PM, ITTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The Threat Simulators program consists of hardware simulators and software simulations of threat weapons systems required for US Army testing and training. These systems provide a realistic opposing force environment for developmental and operational Test and Evaluation of Army tactical systems and meet selected Tri-Service requirements.

Aviation Combined Arms Tactical Trainer - Aviation Reconfigurable Manned Simulation (AVCATT-A)	III	PM, CATT		CG, STRICOM	BG Bond

AVCATT-A is the second acquisition in the CATT family. It includes an expansion of the CCTT infrastructure (terrain, SAF, AAR, etc.) and addition of reconfigurable manned modules to support Aviation Collective training tasks. AVCATT-A supports Total Army training, with fielding to both the Active Army and Reserve/National Guard. AVCATT-A will be capable of both stand-alone Aviation focused training and linking with CCTT for robust Combined Arms training exercises. The addition of AVCATT-A to the CATT family greatly benefits the Army, allowing critical Air-Ground synchronization tasks to be trained and practiced.

C4I Simulations Systems (C4ISS)	III	PM, C4ISS	PDRR/EMD	CG, STRICOM	BG Bond

C4ISS program integrates specific activities of ground warfare (engagement and maneuver), Command Control Communications Computers and Intelligence (C4I), combat support and combat service support. One major component is OneSAF, a composable, next generation CGF that represents a full range of operations, systems and control processes from individual combatant and platform to battalion level. OneSAF provides a variable level of fidelity that supports all modeling and simulation (M&S) domains and employs appropriate representations of the physical environment and its effect on simulation activities and behaviors. A second major component, STOW-A, develops (within the Army) a capability to operate in a distributed, seamless, interactive environment between selected live, virtual and constructive simulations linked to Command Control Communications Computers Surveillance and Reconnaissance (C4ISR) systems.

Close Combat Tactical Trainer (CCTT)	II	PM, CATT	PFDOS	AAE	Mr. Hoeper

The CCTT program provides for the development and fielding of a networked system of interactive computer driven simulators, emulators, and semi-automated forces that replicate combat vehicles and weapon systems, combat support systems, combat service support systems, and command and control systems to create a fully integrated real-time collective task training environment. These trainers enhance realism and allow soldiers and units to learn tactical combat lessons in maneuver, command and control, and improved teamwork for increased survivability, combat effectiveness and warfighting skills.

Family of Simulations	III	PM, WARSIM	EMD/PFDOS	CG, STRICOM	BG Bond

The FAMSIM program consists of constructive simulation systems which provide man-in-the-loop command and control training for commanders and their staffs in a realistic, stress-filled environment for company/team through Echelons-Above-Corp levels. The program consists of the Corps Battle Simulation (CBS), Aggregate Level Simulation Protocol (ALSP), Brigade/Battalion Simulation (BBS) and Tactical Simulation (TACSIM).

Fire Support Combined Arms Tactical Trainer (FSCATT)	III	PM, GCTS	PFDOS	CG, STRICOM	BG Bond

The FSCATT is an integrated, individual and collective training system for the Field Artillery, consisting of a network of three training systems: a Howitzer Crew Trainer/weapon system strap-on devices, a Forward Observer trainer and a collective Training Control System. FSCATT exercises the FA gunnery team in realistic fire missions with a reduction in expenditure of ammunition and related operational costs.

Ground Combat Training Systems (GCTS)	III	PM, GCTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The GCTS program consists of high fidelity precision gunnery trainers, engagement skills trainers, small arms trainers, weapon appended training systems, part-task and maintenance trainers, as well as embedded training systems. These systems support Army's Armor, Infantry, Artillery, Air Defense and Engineer training requirements as well as training requirements for major weapon system platforms.

Ground Targets	III	PM, ITTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The Ground Targets program consists of surrogate and actual foreign vehicle targets as well as virtual target computer models of ground vehicle targets. These targets are required to support the Army's Test & Evaluation (T&E) of advanced weapon systems as well as support training worldwide during live fire exercises at home station, combat training centers and OCONUS theaters of operation.

Live Fire Training System (LTS)	III	PM, LTS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The LTS program consists of systems required to support live force-on-force training, providing instrumentation/feed-back systems, battlefield effects, tactical engagement systems and opposing forces representations.

Major Instrumentation Program	III	PM, ITTS	PDRR/EMD	CG, STRICOM	BG Bond

This program is designed to develop and acquire major test technology and instrumentation to perform Test and Evaluation (T&E) of Army weapon systems. This program covers technologies and instrumentation for both technical and operational testing.

Mobile Automated Instrumentation Suites (MAIS)	III	PM, ITTS	EMD	CG, STRICOM	BG Bond

MAIS is a mobile Real Time Casualty Assessment (RTCA) instrumentation system that supports operational testing of current and future weapon systems through software control of the player's engagement parameters, real time mission control and data collection. The system consists of Player Units for instumenting weapons platforms and the Command, Control, Communication (C3) Center for pre-mission setup, control, and analysis. MAIS will interoperate with current electronic combat equipment and emerging weapon systems. It provides five categories of player instrumentation: fixed/rotary wing aircraft, tracked/wheeled vehicles (artillery, air defense and crew served weapons) and individual soldiers.

Multiple Integrated Laser Engagement System (MILES) 2000	III	PM, LTS	PFDOS	CG, STRICOM	BG Bond

MILES 2000 is a program to procure replacements for the basic MILES devices which provide tactical engagement simulation for direct fire, force-on-force training using eye-safe laser "bullets". The devices replicate the ranges, vulnerabilities, weapon characteristics and ammunition of the weapons being simulated. The devices are configured to cover a wide range of existing weapons and are capable of being readily adaptable to new weapons or modifications to existing weapons.

Synthetic Environments and Advanced Distributed Simulations (SEADS)	III	PM, SEADS	PDRR/EMD/PFDO	CG, STRICOM	BG Bond

The SEADS program consists of multiple activities to support Synthetic Environment and SBA/SMART implementation. The Advanced Simulation Program (ASP) provides state-of-the-art technologies to facilitate experiments at the Core Distributed Interactive Simulation (DIS) Facilities (CDFs). The SEADS program also provides for services of the Combined Arms Assessment Network (CAAN), consisting of the Operational Support Facility (Orlando, FL), Land Warrior Test Bed (Ft. Benning GA), Mounted Warfare Test Bed (Ft. Knox KY) and Aviation Test Bed (Ft. Rucker AL), for conducting various experiments within a virtual environment.

Warfighters' Simulation (WARSIM) 2000	II	PM, WARSIM	EMD	AAE	Mr. Hoeper

WARSIM 2000 is the Army's next generation command and control constructive training simulation. It will support training for Commanders and Staffs from Battalion through Echelons-Above-Corps (EAC). It will replace the Army's current CBS, CSSTSS, and TACSIM systems and will be fielded Army-wide. WARSIM will also provide the Land Warfare functionality for the Joint Simulations System (JSIMS).

ORGANIZATION DAR, SBCCOM *Total: 69*

Program Title	*ACAT Level*	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
500 Foot Low Velocity Airdrop System (LVADS)	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

LVADS combines standard Airdrop components (Type V platform, parachutes, and associated hardware) augmented with technology enhancements, to achieve precision airdrop at low

60K Low Velocity Airdrop System	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The 60k LVADS is comprised of a conventional parachute design and many improvements over existing low velocity airdrop components. It will allow deployment of equipment up to 60K lbs (total rigged weight) from an altitude of 2K ft at speeds of 130 to 150 knots. The system incorporates existing 42K lbs LVAD technology with new developments/improvements to accommodate the higher capacity.

Advanced Clothing Repair Equipment	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Advanced Clothing Repair program will develop and introduce updated capabilities to repair uniforms, shelters and associated items of equipment in the field. Commercial technologies such as heat sealing, ultrasonic welding and adhesive bonding will be integrated into this system. This system will then be provided as upgrades to existing fabric repair assets.

Advanced Food Sanitation	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Advanced Food Sanitation Center provides an enhanced capability to clean/sanitize food service equipment and a method to control kitchen grey water. This center reduces the number of required burners from three to one.

Advanced Tactical Parachute System	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Advanced Tactical Parachute System will replace the current military static line parachute, the T-10 and the T-10R reserve parachute, which was fielded in the 1950's. "Leap-ahead" technology will provide a system that meets the needs of the paratrooper well into the next century, reducing landing related injuries.

All Purpose Weapons and Equipment Container System	III	PM, Soldier	PFDOS	DAR SBCCOM	COL(P) Mangual

The system is a family of lightweight, multipurpose, weapons equipment containers for use by individual parachutists. The AIRPAC will consist of two containers which, when employed separately, together, or with the M-1950 weapons case, will provide parachutist's delivery of a wide variety of combat equipment, weapons and missile systems. Containers will have a single point release system which allows the container and leg tiedown straps to be released simultaneously. Current weapons/equipment containers and jump packs are too heavy and bulky and offer limited range of application use. PER W. STUDEBAKER, ZCS - DELETE THE PROGRAM

Ammunition Solar Cover	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Ammunition Solar Cover reduces solar loading on ammunition in field storage; is durable, easy to erect, transport and store; and is resistant to the deteriorating effects of the weather, climate and long term storage. The Type I covers an area 50 x 50 feet and the Type II covers 1/4 acre.

Automatic Building Machine (ABM)	III	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The ABM is a commercially available mobile factory that enables engineers to quickly construct metal buildings.

Automatic Chemical Agent Alarm (ACADA) M22	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The Automatic Chemical Agent Alarm/Non-Developmental Item (ACADA/NDI) is a man portable automatic alarm system capable of detecting blister and nerve agents. The ACADA/NDI operates with no human interference after system start-up, detects automatically for a minimum of 24 hours, provides audio and visual alarms, and has a communication interface to support battlefield automation systems. The ACADA/NDI meets the critical needs of the U.S. Forces for an automatic point sampling chemical agent alarm.

Aviation Maintenance Shelter	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The AMS will be a portable, lightweight temporary facility to support Army rotary-wing and fixed-wing aircraft maintenance in forward operational areas without fixed facilities. The AMS is needed by all aviation maintenance units and will be capable of sheltering the following aircraft: UH-60, CH-47D, AH-64, OH-58D, MH-60K, MH-47E, C-12, and RC-12 aircraft. The AMS will be used at Intermediate Staging Bases and at semi-fixed sites supporting a wide variety of contingency operations.

Ballistic Hardened Shelter	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

This effort will provide a HMMWV mounted shelter with inherent ballistic protection. Several programs, including THAAD and GBR have a requirement for increased survivability of personnel and mission equipment through increased ballistic protection. Modeling and Simulation will be used to analyze and develop a structural design that balances protection afforded and system weight. Techniques to be investigated and evaluated include external protective blankets, internal protective drapes, wall construction with kevlar, ceramic, or spectra material skin.

Ballistic Protective System	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Ballistic Protective System is a lightweight, modular system designed to provide ballistic protection to soldiers in vehicles and shelters as well as to static equipment such as

Ballistic Protective System (BPS)	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

BPS provides fragmentation protection against indirect fire munitions for supplies and equipment. The BSP consists of modular interlocking panels which have an outer shell of camouflage patterned fabric that reduces threat identification. An inner layer of flexible, ballistic-resistant material provides protection from fragmentation. The panels include a V50 rating of 1500 feet per second velocity for 44-grain fragments and weigh approximately 1.2 lbs per square foot. One complete system includes sufficient panels to cover a fully loaded Palletized Loading System flatrack.

Binoculars, Mini M24	IV	PM, Enhanced Soldier Systems	PFDOS	PM, Soldier	COL Jette

Light weight, miniature binocular capable of fitting in the cargo pocket of the BDU. In support of the soldier enhancement program.

Camouflage Cover, Concealment and Detection Avoidance Shelter	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The Camouflage, Concealment and Detection Avoidance Shelter is a 2 year streamlined R&D program that begins in FY00. It will develop a capability to provide rigid wall shelters a reduced signature with respect to visual, thermal, near IR, and radar detection without the use of external camouflage netting. This program will provide signature management as an inherent part of the shelter.

Cargo Bed Covers	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

Cargo Bed Covers are low-cost, lightweight, general purpose enclosures designed to protect mission equipment from the harmful effects of environmental exposure.

Chaplains Logistic Support Package	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The CLSP is needed to enhance the ability of Brigade and Battalion level Unit Ministry Teams' capability to carry ecclesiastical supplies, administrative supplies, and computer hardware in a consolidated package wherever they travel on the battlefield. The CLSP container will carry two packaged chaplain resupply kits, a notebook computer, assorted publications, forms and personal religious items required by the chaplain. The container will function as an altar/field desk.

Chemical/Biological Protected Shelter (CBPS)	IV	PM, Soldier Support	PFDOS	Acq Ex,	Mr. McKivrigan

Highly mobile, CB protected shelter to provide a contamination-free, environmentally controlled working area for a battalion aid station singly, or, when joined with another CBPS, a division clearing station. It reduces set-up time, increases usable floor space, improves airlock operations and ventilation, and reduces reliance on prime movers.

Containerized Batch Laundry	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Containerized Batch Laundry (CBL) provides the capability to wash and dry 200 pounds of clothes per hour in a safe and clean environment. One CBL can replace two of the current Army M-85 trailer-mounted laundry systems. To conserve water, the system is equipped with water reuse capability capturing up to 30% of the water used. The CBL is currently in production for the Force Provider system.

Containerized Kitchen	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Containerized Kitchen consists of standardized kitchen components (including grill, cooking racks, field ovens) carried in an 8x8x20 ISO container mounted on a tactical trailer. It is a required element of the Army Field Feeding System-Future.

Containerized Self Service Laundry	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

This item allows soldiers to wash their personal clothing. Positioned at brigade support areas, it allows field service companies to move forward to service forward area troops. Consists of commercially available laundering equipment mounted in a standard ISO container.

Containerized Shower	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Containerized Shower provides safe, sanitary and modern shower facilities in mature theaters of operation.

Disperser, Riot Control Agent, Manually Carried: Mid-size, XM37	III	PM, Enhanced Soldier Systems	EMD	DAR SBCCOM	COL(P) Mangual

The XM37 Mid-Size Riot Control Disperser (MRCD) is a Soldier Enhancement Program (SEP). The program is designed to provide a lightweight riot control disperser by examining non-developmental items and resting their suitability for military use. Refill and Repressurization kits that will interface the MRCD with existing military compressors and riot control agent containers are also being developed under a separate SEP. This item is a new capability and will not replace an item already fielded.

EMI Hardened Non-Expandable Rigid Wall Shelter	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

This program will incorporate electromagnetic interference shielding into the Army Standard Family ISO Rigid Wall Shelters. It consists of fabric reinforced woven metal cloth and sliding retainer fastening devices, over hinged joints. The fabric reinforced woven metal cloth material will be permanently attached to the adjoining panel surfaces providing continuity with the capability to fold with the hinged panels. In latching panel areas, the same material will be used with the sliding retainer fastening devices to provide quick installation where permanent installation is impossible.

Enhanced Soldier Systems	III	PM, Enhanced Soldier Systems	*	DAR SBCCOM	COL(P) Mangual

Enhanced Soldier Systems is a compilation of ACAT III and IV products centrally managed the PMO. The products within this program consist of nearly every item that is worn, carried or consumed by the individual soldier. This includes uniforms, specialty clothing items, and chemical biological protective overgarments. Also included are individual equipment items such as sleeping bags, individual shelters and specialty items such as riot control equipment and protective body armor. There are three major components of the ESS program; Clothing and Individual Equipment, the Soldier Enhancement Program and Centrally Funded and Fielded items. There are approximately 110 items actively being developed or procured under the ESS program. In accordance with the concept of Total Life Cycle Management, the PMO is additionally responsible for approximately another 150 items that are either being developed in the Technical Base or have already been fielded.

* Systems managed under the Enhanced Soldier System are in all phases of development and production.

AMC Systems

Extracted Parachute Jettison Device (EPJD)	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The EPJD allows for the jettisoning of malfunctioning extraction parachutes. The system employs a pyrotechnic release mechanism, which when fired, severs the extraction parachute from a load that has been hung up during airdrop operations. This allows the aircraft crew the ability to remotely disconnect the hung load from the parachute without risk of personal injury.

Family of Field Latrines	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Family of Field Latrines meets new operational requirements for latrine support across the entire spectrum of military operations. The Modular Initial Deployment Latrine is a readily available, portable and highly mobile latrine that accompanies the deploying personnel into a theater of operations. The Maturing Theater Latrine is a more stable, durable system available in the theater following initial deployment. The Follow On Latrine is a containerized system used in the mature theater in the rear area.

Family of Space Heaters	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

Provides safe, efficient heat for soldiers, supplies and equipment in tents and shelters. The current non-powered military tent heaters (M-1940's and 50's) represent safety hazards in the field, provide poor combustion of diesel fuel, low combustion efficiencies and poor heat distribution in tentage. The FOSH replaces the current military tent heaters, overcoming current deficiencies and safety hazards and satisfy requirements for new military tentage developments, sizes and materials.

Field Incinerator	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

Lightweight, easily maintainable and portable incinerator to be used during OOTW to reduce/eliminate the build-up of trash produced during normal/routine operations. A field service incinerator serves to provide a safe, economical and environmentally sound means of disposing of the trash produced during military operations during OOTW.

Food Sanitation Center	III	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The Food Sanitation Center provides a capability to clean/sanitize food service equipment.

Force Provider	III	PM, Force Provider	PFDOS	DAR SBCCOM	COL(P) Mangual

Force Provider is a containerized highly deployable "city" designed and engineered to provide climatic-controlled billeting, dining facilities, showers, latrines, laundry and morale, welfare and recreation facilities in modules for 550 soldiers. Force Provider missions provide rest and refit facilities for combat weary soldiers, theater reception, intermediate staging base redeployment and base camps for other military operations, such as humanitarian and disaster relief, and peacekeeping/enforcement missions. The Army objective is 36 modules and 12 cold weather kits for operations to -15 degrees F.

Generator Set, Smoke, Mechanical: Pulse jet, M157A2	III	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M157A2 modification program [MA4501] meets the needs of the U.S. Army to immediately satisfy the requirement for a safe, reliable, operationally effective mobile smoke generator system. It incorporates essential user requested safety and operational improvements such as a smaller control panel, improved fire detection equipment, fuel filter/water separator assembly, and a new engine head. These features combine to expand the operational capability from sea level to 8,000 feet. The modification kit program upgrades the basic M157 Smoke Generator Set to the M157A2 Multifuel Smoke Generator Set mounted on a motorized M1037/M1097 HMMWV or mechanized M1059A2/A3 prime mover.

Generator, Smoke, Mechanical: Motorized for dual purpose unit, M56	III	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M56, mounted on the High Mobility Multipurpose Wheeled Vehicles M1113 (HMMWV), disseminates smoke on the move and from stationary positions. It is designed to operate in support of light and airborne maneuver units to defeat enemy sensors and smart munitions such as tank thermal sights, guided munitions, direct energy weapons, and other systems operating in the visual through far-infrared regions of the electromagnetic spectrum. The system uses a turbine engine as a power source to disseminate large area obscurant clouds. The visual screening module is capable of vaporizing fog oil for up to 90 minutes and the infrared module is capable of disseminating a particulate material to provide 30 minutes of screening. A Driver's Vision Enhancer (DVE) modification program was initiated. A pre-planned product improvement (P3I) modificaiton program for next generation millimeter wave (MMW) obscuration will be capable of producing a 30 minute MMW screen.

Generator, Smoke, Mechanical: Mechanized smoke obscurant system, M58	III	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M58 Smoke Generator System is mounted on the M113A3 Armored Personnel Carrier (APC). It permits the same capability of smoke and obscurant protection as the M56, but adds it to the heavy maneuver units. A Driver's Vision Enhancer (DVE) and gas particulate filter unit (GPFU) are also included in this system for Chem/Bio protection. Beginning in FY99 program efforts were re-directed toward the selection of a vehicle chassis for the fielding of a tracked M58 system with sufficient capacity to include additional obscuration capability. A follow-on Modification program is programmed to incorporate the new MMW obscurant technology. The planned system will have mobility equal to the mechanized forces that it supports.

Grenade Launcher, Smoke: Screening, TA, XM90	III	PM, Smoke & Obscurants	EMD	DAR SBCCOM	COL(P) Mangual

The XM90 grenade is a soft launched, non-fragmenting, pyrotechnic smoke dispenser. The XM90 is constructed to include three individual dual-ported, core burning smoke canisters. The canisters are ignited and ejected by a charge of black powder contained in the grenade expulsion base. When fired as a salvo of 4 grenades from the LVOSS (XM7) discharger, the smoke grenades produce an effective obscuring cloud a minimum of 35 meters wide at a height of at least 2 meters at a distance of 35 meters from the vehicle. The cloud forms within 6 seconds and lasts a minimum of 20 seconds. The XM90 grenade is compatible with presently fielded 66mm smoke grenade launchers. The XM90 grenade will counter threat weapon systems operating in the visual and near infrared portions of the electromagnetic spectrum enhancing the survivability of the vehicle.

Grenade, Hand: Incendiary, TH3, Directed, XM89	IV	PM, Enhanced Soldier Systems	EMD	Acq Ex,	Mr. McKivrigan

The XM89 utilizes state-of-the art technology and material to provide a lighter/smaller package with an enhanced thermal effect and a significantly enhanced destructive capability compared to the current thermal grenade.

Improved Chemical Agent Monitor (ICAM)	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The ICAM is a hand held, soldier operated, post attack device for monitoring chemical agent contamination on personnel and equipment. It detects vapors of chemical agents by sensing molecular ions of specific mobility (time of flight) and uses timing and microprocessor techniques to reject interference's. The monitor detects and discriminates between vapors of nerve and mustard agents. The ICAM consists of a drift tube, signal processor, molecular sieve, membrane, and expendables such as batteries, confidence tester and dust filters. The monitor is 4" x 7" x 15", and weighs approximately 5 pounds.

Joint Service General Purpose Mask	III	PM, NBC	PDRR	DAR SBCCOM	COL(P) Mangual

The JSGPM is the replacement for the M40, M42, MCU-2/P. The JSGPM will significantly reduce mission degradation while being compatible with future equipment and soldier systems. The JSGPM will reduce weight and bulk and breathing resistance by as much as 50%. The JSGPM will also improve vision coupling, communication effectiveness, and comfort/wearability. The mask will significantly reduce total ownership cost/life cycle cost. The JSGPM will be virtually maintenance-free and may be of a low enough unit cost to be classified as disposable/replaceable after decontamination to a point.

Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD)	III	PM, NBC	EMD	DAR SBCCOM	COL(P) Mangual

The Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD) is a small, fully automatic agent vapor and aerosol detector. The unit is capable of on-the-move real-time operation from either aerial or surface platforms. The unit will detect agent cloud up to 5 kilometers and provide alarm for reconnaissance and non-reconnaissance (contamination avoidance) missions. The detector also provides chemical contamination information and data on means to avoid contamination. The JSLSCAD is equipped for visual and audible alarm, and can display the agent class and concentration levels. This information is available locally and or for transmission to battlefield information network. JSLSCAD also has the capability to indicate an all-clear condition.

Kitchen Company Level Field Feeding (KCLFF) - Enhanced	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The KCLFF Enhanced is used for field feeding of Company sized units and is designed to heat, deliver, and serve one heat and serve ration meal per day for up to 200 soldiers. KCLFF consists of various kitchen and food service hardware and is designed to be hauled by light wheeled vehicles.

Laundry Advanced System	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Laundry Advanced System is a laundry-processing and water recycling system which processes 400 pounds of laundry per hour and recycles about 97% of the water used in the laundry process.

Light Vehicle Obscuration Smoke System (LVOSS)	III	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The Light Vehicle Obscuration Smoke system (LVOSS) is a self-defense smoke/obscurant device externally mounted on light vehicles. It counters threat weapon systems operating in the visual and near-infrared portions of the electromagnetic spectrum. The LVOSS consists of the M7 Discharger, required mounting equipment, and a family of grenades. LVOSS installation kits contain an arming and firing unit (A/FU), wiring harness and brackets to mount the M7 Dischargers. The M304 installation kit is for the M966 Infantry TOW equipped HMMWV. The M305 and M310 installation kits mount the A/FU, four M7 Dischargers and the wiring harness to the Military Police M1025 and M1114 HMMWV, respectively. The LVOSS is especially designed to launch non-fragmenting grenades which are of low toxicity and environmentally safe. It can also be used to launch standard grenades. This program supports all current mission requirements for Army MP forces. No other procurement is currently planned. All LVOSS components are integrated as a complete system, operated from within the host vehicle using the A/FU. Host vehicles retain their combat load and operational capability in mobility, firepower and communications when configured with LVOSS.

Lightweight Maintenance Enclosure	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Lightweight Maintenance Enclosure is a highly mobile, quickly deployable shelter which allows maintenance to be performed across the battlefield under all environmental conditions. It accommodates tracked and wheeled vehicles, engineer, signal, armament and ground support equipment.

M6 Discharger	III	PM, Smoke & Obscurants	PFDOS	DAR SBCCOM	COL(P) Mangual

The M6 Discharger will provide the “Wolverine” Heavy Assault Bridge or other host vehicle with concealment from threat surveillance, target acquisition, and weapons guidance systems by projecting the 66mm family of smoke grenades. Each M6 Discharger consists of a four-grenade launch tube module that is designed for use on any vehicle platform. Each tube of the M6 Discharger can be separately fired on command. The system provides up to 360 degrees of coverage, overhead screening protection, and can interface with the Vehicle Integrated Defense System (VIDS) control. This current program fielding of the “Wolverine” Heavy Assault Bridge.

Mask, CML-BIO: Aircrew, M45	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The M45 Mask is being developed as the replacement for the M49 Mask. It will be usable by all Army helicopter crews except the AH-64 pilots. The mask consists of close-fitting eye lenses, front and side voice emitter for face-to-face and telephone communication, a microphone pass through for aircraft communication, a drink tube pass through for liquid nutrients, a low profile canister interoperability hose assembly to allow both hose and face mounted configurations, interchangeable nosecups, a rubber face piece with an in-turned peripheral seal and a second skin and hood. The mask will provide the required CB protection without the aid of forced ventilation air while maintaining compatibility with aircraft sighting systems and night vision devices. Injection molded composite materials will be used for the component parts to reduce weight and cost.

AMC Systems

Mask, CML-BIO: M40A1/M42A2	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The M40A1/M42A2 masks provide respiratory, eye and face protection against chemical and biological agents. The masks consist of a silicone rubber face piece with an in-turned peripheral face seal and binocular rigid lens system. A face-mounted canister (gas and aerosol filter) can be worn on either the left or right cheek. For the M42A2 armored vehicle version, the canister is connected to the mask via a hose rather than being mask mounted. A microphone is included in the M42A2 armor crew mask. The masks come in small, medium and large sizes.

Mechanized Anchoring System	III	PM, Soldier Support	CE	DAR SBCCOM	COL(P) Mangual

The Mechanized Anchoring System will provide a quickly deployable and retrievable family of mechanized shelter anchors with worldwide capability. Anchors will range in capacity from the lower end which will replace wooden stakes to the upper end that will provide soft shelter complexes a fixed point capable of restraining multiple high wind lines. Additionally, a reliable, rugged installation and retrieval system will be provided.

Millimeter Wave (MMW) Obscuration	III	PM, Smoke & Obscurants	EMD	DAR SBCCOM	COL(P) Mangual

The MMW program will develop an obscurant material which can be used in either an offensive or defensive mode against sensor systems such as radar and thermal homing sensors. Concepts to be investigated include an on-board cutting and dispensing system, as well as a pre-chopped material. The final system will be capable of being added onto both the M56 and M58 smoke generator Systems.

Mobile Kitchen Trailer-Improved	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Mobile Kitchen Trailer-Improved addresses the operational and functional deficiencies of the Mobile Kitchen Trailer including operation during cold weather conditions, exhaust of cooking by-products, cooking capacity, and interior lighting.

Modern Burner Unit (MBU)	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The MBU is a replacement for the unsafe Military Field Burner (M2). It will operate on JP-8 fuel, has immediate on/off capability and increased safety.

Modification, Reconnaissance System, NBC: M93A1 (FOX)	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The M93A1 FOX NBCRS is a dedicated system of NBC detection, warning and sampling equipment integrated into a high speed, high mobility, wheeled armored carrier capable of performing NBC reconnaissance on primary, secondary or cross country routes throughout the battlefield. The M93A1 has the capability to find and mark chemical and nuclear contamination. Through the secure communications system, it provides warnings to follow on forces. The crew is protected by the inclusion of an on-board overpressure system.

Modified Improved Reserve Parachute System (MIRPS)	III	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The MIRPS uses the existing 24-foot diameter reserve parachute with a new spring deployment activated device (DAD), a new pilot parachute, and a modified packtray. In appearance the MIRPS will resemble the current T-10R reserve parachute. However, the MIRPS incorporates a new reserve activation system where no action is required by the trooper after pulling the reserve handle.

Modular Command Post System	III	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The Modular Command Post System is highly mobile, lightweight, and easy to set up/strike. The number of tents that may be complexed together is limited only by terrain. It is used when tactical situations require high mobility and high frequency redeployment.

Modular Decontamination System (MDS) M21/M22	IV	RDEC	PFDOS	Acq Ex,	Mr. McKivrigan

The MDS consists of one Decontaminant Pumper (DP) module, and two High Pressure Washer (HPW) modules. Each module may be transported on the high mobility trailer towed by an M56 Smoke System or a HMMWV. Chemical units with TO&E will be prfovided site material for detailed equipment decontamination and non chemical units with the capability for operational decontamination as described in FM 3-5. The MDS will be fielded to the dual purpose smoke/chemical companies replacing the M12A1 Skid Mounted Decon Apparatus and the M17 Lightweight Decon system. Non-chemical units may be provided with the M22 HPW for operational decontamination.

Modular General Purpose Tent System	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Modular General Purpose Tent System provides protection for personnel and equipment from debilitating effects of continuous exposure in climatic categories hot, basic, cold and severe cold. The MGPTS will be used to support operations across the operational continuum.

Modular Relocatable Buildings	III	PM, Soldier Support	CE	DAR SBCCOM	COL(P) Mangual

The Modular Relocatable Buildings will provide modular semi-permanent, securable structures. Current field fabricated solutions are labor intensive, expensive and unrecoverable.

Mortuary Affairs Remains Kit	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

The MARK will provide a combat service support capability and/or augment current capabilities for the Mortuary Affairs Company. The MARK will consist of a Racking System, Conveyor System, and nestable transfer cases. The Racking System will be compatible with the next generation of refrigerated container systems. The Racking System and Conveyor System should be composed of lightweight, durable materiel and be able to be sanitized.

Multipurpose Integrated Chemical Agent Detector (MICAD) Alarm	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The MICAD is an NBC warning and reporting system that monitors NBC detectors, sensors and tactical communications equipment on board vehicles, vans and shelters. The MICAD digitizes new contamination information for use by contamination avoidance software such as the Automated NBC Information System (ANBCIS) both locally and remotely. The MICAD digital data and NBC alarms are sent and received on standard voice and digital tactical communications systems for both horizontal and vertical transmission on the battlefield.

Project Soldier	III	PM, Soldier	*	DAR SBCCOM	COL(P) Mangual

Project Soldier is responsible for a host of products worn, carried or consumed by the individual soldier. There are two subordinate product managers included in the PMO's responsibilities, Land Warrior and the Enhanced Soldier Systems. Separate descriptions and accounting information for these products are listed elsewhere independently within this document.

* Systems managed under the Project Soldier are in all phases of development and production.

Radiac Set AN/UDR-13, Pocket Radiac	III	PM, NBC	PFDOS	DAR SBCCOM	COL(P) Mangual

The AN/UDR-13 Pocket Radiac (PR) Set is a compact, handheld, tactical device capable of measuring the gamma dose-rate and gamma/neutron cumulative dose in a battlefield environment. Its pocket size permits convenient use by airborne, mounted, and ground forces. Presettable alarms are provided for both the dose-rate and total dose modes. A push-button pad enables mode selection and functional control. Data readout is by liquid crystal display (LCD).

Refrigerated Container Systems	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

Provides mission-critical refrigeration capability at forward areas for specialized military units. The Refrigerated Container System is used to transport perishable rations for field feeding units and human remains for hospital/mortuary affairs units.

Self-Powered Mutil Functional Water Heater	III	PM, Soldier Support	CE	DAR SBCCOM	COL(P) Mangual

The Self-Powered Multi-Functional Water Heater program will provide a portable, multi-functional water heater/power plant for providing forced hot water for field use in field sanitation and showers as well as laundry applications for units in remote locations. This equipment will replace the immersion heater that is inefficient and dangerous. This equipment will be lightweight, rugged, reliable and capable of producing its own power.

Small Unit Shower	III	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The Small Unit Shower will be a compact, lightweight field shower system to service small units, developed under the Soldier Enhancement Program.

Soldier Crew Tent (SCT)	III	PM, Soldier Support	PFDOS	DAR SBCCOM	COL(P) Mangual

The SCT provides environmental protection for the billeting of small unit elements. It is a lightweight, durable, single frame, single hub tent.

Sorbent Decontamination System (SDS)	IV	RDEC	EMD	Acq Ex,	Mr. McKivrigan

The SDS will consist of a decontaminant superior to XE555 used in the M295 kit to remove chemical agents from military equipment. The new absorbent will reduce off-gassing and contact hazard associated with the absorbent. It will be used by the soldier to decon personal equipment, vehicles and weapons..

TEMPER XXI	III	PM, Soldier Support	PDRR	DAR SBCCOM	COL(P) Mangual

TEMPER XXI will replace/upgrade the current Tent, Extendable,Modular, Personnel (TEMPER) to provide improved mobility habitability, rapid erection and strike capability. Lightweight support structure and materials to improve mission performance will provide a tent that allows for multi-functional uses in all climatic conditions. This program will incorporate an airbeam frame for rapid deployment of large complexes for uses such as hospitals, and tent cities. The replacement tent will also utilize the modular deck system currently under development.

Tester, Leakage, Protective Mask: Protection Assessment Test System, M41	IV	RDEC	PFDOS	Acq Ex,	Mr. McKivrigan

The M41 Protection Assessment Test System (PATS) is designed to check the fit and readiness of protective masks. The PATS is approximately 200 cubic inches in size and 4 lb. in weight. It is based on a miniature Condensation Nucleus Counter that continuously samples and counts individual particles that occur naturally in the surrounding air. The PATS measures the concentration of these particles inside and outside of the mask and calculates a Fit Factor.

Universal Static Line	III	PM, Soldier Support	EMD	DAR SBCCOM	COL(P) Mangual

The Universal Static Line, when fully developed, will replace the need to have separate length static lines for each different airdrop aircraft. The line will either be one standard length, which successfully works with each aircraft, or an adjustable line that can be tailored to each aircraft.

Vehicle Engine Exhaust Smoke System (VEESS)	III	PM, Smoke & Obscurants	EMD	DAR SBCCOM	COL(P) Mangual

The Vehicle Engine Exhaust Smoke System (VEESS) kit consists of a lightly armored, exterior 15-gallon Fog-Oil-Tank that attaches using existing mounting bolts around the left signal light. It utilizes the existing VEESS pump to spray fog oil into the engine exhaust manifold. The fog oil recondenses upon contact with the atmosphere to produce a dense screen. The VEESS enhances unit survivability by screening movement, concealing positions and defeating enemy visual and near infrared target acquisition systems such as laser designators and laser range finders throughout the spectrum of warfare. This modification can be added without increasing overall vehicle gross weight if coupled with a substitution of M250 grenade discharger with the M6 grenade discharger.

ORGANIZATION DSA, AMCOM *Total: 45*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
AH-1 COBRA	III	PM, Scout/Attack Helicopter	PFDOS	DSA, AMCOM	BG(P) Armbruster

The AH-1 is an armed attack, single-engine, tandem seated helicopter with a maximum gross weight of 10, 000 pounds and a T53L703 1600 SHP engine. The armament system consists of the M65 TOW Missile System, 20 mm gun, and Hydra-70 rockets.

Air Traffic Nav Integration and Coordination System(ATNAVICS), Fixed Base Precision Approach Radar	III	PM, ATC	EMD	DSA, AMCOM	BG(P) Armbruster

The ATNAVICS is a tactical precision approach radar system that will provide the capability to conduct area surveillance and precision approach control for aircraft departures and arrivals in all weather conditions on a 24-hour basis. The ATNAVICS will replace the AN/TSQ-71, Landing Control Central.

AN/FPN-66 Radar	III	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

A non-tactical air traffic control system that provides an electronic surveillance capability in the approach and terminal area at Army airfields by providing for the separation of air traffic (IFR & VFR) by tower and radar controllers. In two cases it is used to enhance range control operations. It is a single channel analog and dual channel digital secondary radar.

Automated Integrated Survey Instrument (AISI)	IV	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

An electronic total station survey instrument which provides the surveyor with a single instrument to achieve all functions formally carried out with theodolites, tapes, and distance

AVENGER Weapon System	IV	PM, SHORAD	PFDOS	DSA, AMCOM	BG(P) Armbruster

AVENGER is the Line-of-Sight-Rear component of the Forward Area Air Defense program.

Aviation Ground Power Unit (AGPU)	IV	WSM AGSE	PFDOS	DSA, AMCOM	BG(P) Armbruster

Self-propelled, turbine powered cart which provides hydraulic, AC/DC power, and pneumatic power for UH-60, OH-58D, CH-47, and AH-64 aircraft.

Base Shop Test Facility	III	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Base Shop Test Facility (BSTF) is a member of the Integrated Family of Test Equipment (IFTE) and provides general purpose automatic electronic testing capability at the direct and general support levels of maintenance. The BSTF in the field is self-contained, consisting of the tester and associated test program sets mounted in two S-280 shelters, on two five-ton trucks, powered by two 60kW generators. The IFTE was designated a DOD standard family of testers in Apr 94.

BLACK HAWK (UH-60) Utility Helicopter	IC	PM, Utility Helicopter	PFDOS	AAE	Mr. Hoeper

The Black Hawk (UH-60) is a utility, tactical, transport helicopter. It is the primary helicopter for air assault, general support, and aeromedical evacuation units. Modified Black Hawks also fulfill command and control, electronic warfare, and special operations roles. An 11-man, fully equipped infantry squad can be carried in one Black Hawk. The Black Hawk also is the first utility and assault helicopter that adds to the Army's Division-level mobility; for example, it can reposition a 105 mm howitzer, its crew of six, and up to 30 rounds of ammunition in a single lift. The aircraft's critical components and systems are armored or redundant to enable it to withstand multiple small arms hits, and its airframe is designed to progressively crush on impact to protect the crew and passengers in a crash. Ease of maintenance in the field was designed into the Black Hawk from the beginning. The Army began fielding the UH-60 in 1978. Between 1978 and 1989 the Army procured UH-60A model aircraft. In October 1989, the power train system was upgraded, resulting in a model designation change from UH-60A to UH-60L. The Army continues to procure Black Hawks under a multi-year, multi-service contract. Current procurement objective is 1763. The Army plans to initiate (FY02) a Service Life Extension Program (SLEP) to convert the aging UH-60A models to the UH-60L+ configuration to support Army XXI requirements. The Army plans to convert UH-60A model aeromedical evacuation helicopters to the UH-60Q configuration with enhanced capabilities to meet this mission. This program will be initiated with the SLEP in FY02 to provide mutual leveraging and cost savings.

C23 Fixed Wing Aircraft	III	PM, Fixed Wing Aircraft	PFDOS	DSA, AMCOM	BG(P) Armbruster

Twin turbo prop, high wing, cargo aircraft. Capable of operations from unimproved runways. Equipped for paradrop, medevac, cargo missions with rear ramp.

Calibration Sets Equipment	III	PM, TMDE	EMD/PFDOS	DSA, AMCOM	BG(P) Armbruster

The Calibration Sets Equipment program provides calibration standards, auxiliary equipment, accessories, and repair equipment required for the Army's test, measurement, and diagnostic equipment (TMDE) calibration and repair program. This equipment is used by direct support/general support maintenance units to verify accuracy of TMDE and ensure legal traceability to standards established and maintained by the U.S. National Institute of Standards and Technology.

CHAPARRAL Guided Missile System	IV	WSM Hawk	PFDOS	DSA, AMCOM	BG(P) Armbruster

CHAPARRAL Guided Missile System is a standard short-range, low altitude, forward area, air defense system.

Communications Console System (CCS)	III	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

A communication system switching device for low to medium density air traffic control sites. Targeted sites include locations lacking adequate communications capability or those locations using obsolete AN/FSW-8 communications consoles. This system augments the National Airspace System.

Digital BRITE Radar Indicator Tower Equipment (DBRITE)	III	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

A BRITE-TV type display to ensure flight safety and proper spacing. It is capable of providing the tower controller with positive identification, location, altitude and speed of aircraft within the tower and GCA/FF control zones.

Dragon	IV	WSM Hawk	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Dragon System is a medium range anti-armor/bunker missile system.

Electronic Repair Shelter	III	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Electronic Repair Shelter (ERS) provides a capability for field level repair of circuit card assemblies in line replaceable units and shop replaceable units. It consists of a circuit card tester and two or more electronic repair work-stations, all packaged in an environmentally-controlled shelter. The ERS will be fielded to general support maintenance units at corps level and above, and it will reduce operating and support costs by avoiding the need for evacuation of faulty components to depots or contractors' plants for repair.

Enhanced Terminal Voice Switch (ETVS)	III	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

Performs all control and switching functions needed for ATC voice communications. This includes air to ground to air communications with pilots as well as inter/intra facility voice communications. The switch will meet the needs of both ATC tower and terminal approach control facilities. The ETVS will be modular and customized to fit individual facility requirements.

Fixed Base Precision Approach Radar (FBPAR)	III	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

The FBPAR is a non-tactical precision approach radar system that will provide the capability to conduct area surveillance and precision approach control for aircraft departures and arrivals in all weather conditions on a 24-hour basis. The FBPAR will replace the AN/FPN-40/FSQ-84 Ground Controlled Approach Radar/Air Traffic Control Radar Beacon System.

Fixed Wing Aircraft Upgrades	III	PM, Fixed Wing Aircraft	PDRR	DSA, AMCOM	BG(P) Armbruster

Various avionics upgrades to make aircraft compatible w/ future international nav. requirements, improve aircraft pilotage, and increase aircraft life.

HAWK Guided Missile System	IV	WSM Hawk	PFDOS	DSA, AMCOM	BG(P) Armbruster

HAWK is a medium-range, surface-to-air guided missile system that provides air defense coverage against low-to-medium altitude aircraft. It is a mobile, all weather, day and night system.

Integrated Family of Test Equipment (IFTE)	III	PM, TMDE	EMD/PFDOS	DSA, AMCOM	BG(P) Armbruster

The Integrated Family of Test Equipment (IFTE) program provides automatic test equipment which is configurable to support multiple weapon systems. It consists of the Base Shop Test Facility, the Contact Test Set (CTS) and follow-on CTS(Soldier Portable On-System Repair Tool), and the Electro-Optics Test Facility. The IFTE systems are used at unit and direct support/general support levels, both on and off system, to fault isolate, test, and repair line replaceable units and printed circuit boards. Based on recommendations of a Joint Service Automatic Test Systems Investment Strategy Group, IFTE was designated as a Department of Defense standard family of testers in Apr 94.

Kiowa Warrior (OH-58D)	IC	PM, Scout/Attack Helicopter	PFDOS	AAE	Mr. Hoeper

The Kiowa Warrior is the armed reconnaissance helicopter for the Army. The Kiowa Warrior will start to be displaced by the Comanche, but will be in the active Army until 2022. The OH-58D performs reconnaissance, security, command and control, target acquisition/ designation, and defensive air combat missions. The Kiowa Warrior adds armed reconnaissance and light attack to the basic OH-58D Kiowa mission capabilities. The OH-58D has a Mast-Mounted Sight that houses a Thermal-Imaging System, Low-Light Television, and a Laser Rangefinder/Designator. A highly accurate navigation system permits precise target location that can be handed off to other engagement systems via the Airborne Target Handover System. The Laser Designator can provide autonomous designation for the laser HELLFIRE or remote designation for other laser-guided precision weapons. Air-to-Air Stinger (ATAS) provides security against threat aircraft. The armed retrofit program began in FY91 and provides Air-to-Ground weapons and other improvements to previously produced OH-58Ds. The OH-58D is in the 14th year of production. AHIPs began retrofit/remanufacture in FY93 for the Armed Kiowa Warrior version. Aircraft deployments include the training bases, and operational units worldwide. The Safety Enhancement Program (SEP) began in 1997 and seeks to update the entire Kiowa Warrior fleet with improved engines, crashworthy seats, cockpit airbags, and a digitized Mission Equipment Package.

* Removed as a ACAT IC per the 18 Nov 98 OSD ACAT listing. Change in ACAT level is being staffed.

Laser Target Designators (LTD)	IV	WSM Lasers/Armored Vehicles	PFDOS	DSA, AMCOM	BG(P) Armbruster

LASERS consist of three distinctive models: Laser Target Designator, Modular Universal Laser Equipment, and Ground/Vehicular Laser Locator Designator. All three provide the Army, USMC, and allies with the ability to perform precision strikes via accurate location designation of hostile forces. The M981, FISTV enhances combined arms efficiency by providing the Fire Support Team and the Combat Observation Lasing Team headquarters with an operating base for targeting, self-location, and designation equipment which provides improvements in first round accuracy, mobility, and survivability comparable with the maneuver units being supported.

Light and Special Division Interim Sensor (LSDIS)	IV	WSM LISDIS	PFDOS	DSA, AMCOM	BG(P) Armbruster

LSDIS is a lightweight, ruggedized, highly transportable sensor system.

Light Observation Helicopter	III	PM, Scout/Attack Helicopter	PFDOS	DSA, AMCOM	BG(P) Armbruster

The OH-58A and OH-58C helicopters are low silhouette, single rotor helicopters powered by a single gas turbine, T63-A-700/720, engine. The helicopter is used for observation, scout, and command and control. This is a single pilot aircraft with the capability to carry three passengers or cargo. The OH-58C is an upgraded OH-58A with more powerful engine and transmission and an upgraded navigation and instrumentation capability.

Man Portable Common Thermal Night Sights	IV	WSM Thermal Viewers	PFDOS	DSA, AMCOM	BG(P) Armbruster

Man Portable Common Thermal Night Sights (MPCTNS) is a family of missile systems-mounted and separately employed thermal night sight systems.

Missile Minder System AN/TSQ-73	IV	WSM AN/TSQ-73	PFDOS	DSA, AMCOM	BG(P) Armbruster

The AN/TSQ-73 is an all-microelectronic surface-to-air missile fire distribution system providing command and control.

Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW)	III	PM, MPIM/SRAW	EMD	DSA, AMCOM	BG(P) Armbruster

The MPIM/SRAW is a one-man light weight, shoulder fired, fire and forget, multiple purpose munition capable of defeating enemy forces in buildings, reinforced structures, bunkers and future light weight armored vehicles. The MPIM/SRAW consists of a disposable launcher/carry case equipped with a 2.5X telescopic sight that is compatible with current and future night vision devices. The shoulder launched missile consists of a two state, soft launch propulsion system with inertial guidance and an explosively formed penetrator with follow-through grenade warhead. The missile is capable of being fired quickly from its carrying configuration and safely fired from enclosures. Joint effort with USMC.

National Airspace System (NAS)	III	PM, ATC	EMD/PFDOS	DSA, AMCOM	BG(P) Armbruster

The NAS integration program provides engineering and automation necessary for Army ATC facilities to interface with FAA and sister DOD ATC facilities while controlling aircraft in the National Airspace System. The following systems comprise the NAS program: Digital Airport Surveillance Radar (DASR), Military Airspace Management System (MAMS), Digitized AN/FPN-666 Surveillance Radar System, Video Information Distribution System (VIDS), Uninterrupted Power Supply (UPS), and the Voice/Switch Programs.

New Aviation Tool System 95 (NATS-95)	IV	WSM AGSE	PFDOS	DSA, AMCOM	BG(P) Armbruster

An improved tool system featuring enhanced inventory and quality tools.

New Training Helicopter (NTH)	III	PM, Kiowa	PFDOS	CG, AMCOM	MG Sullivan

The Army's NTH (TH-67) is a Bell 206. Its function is to replace existing Hueys being used for training Initial Entry Rotary Wing students. The TH-67 (Creek) will require approximately one-third the operating and support cost of the Huey.

Non-Destructive Test Equipment (NDTE)	IV	WSM AGSE	PFDOS	DSA, AMCOM	BG(P) Armbruster

Consists of four Air Force managed systems: X-ray, Harmonic Bond Tester, Ultrasound Tester, and Eddy Current Tester. These units support all Army rotary wing aircraft.

RC-12/C-12	III	PM, Fixed Wing Aircraft	PDRR	DSA, TACOM	COL(P)

Various avionics upgrades to make the aircraft compatible with future international navigation requirements, improve aircraft pilotage, and increase aircraft life.

Robotic Combat Support System	III	PM, JPO UGV/S	CE	DSA, AMCOM	BG(P) Armbruster

The Robotic Combat Support System (RCSS) is a light, robotic, soldier-controlled vehicle system used to support several missions by attaching and removing attachments. Capabilities include: compactor, picket driving, anti-personnel mine and booby-trap proofing flail kit. The RCSS will have a medium and light version.

Shop Equipment Contact Maintenance (SECM)	IV	WSM AGSE	PDRR	CG, AMCOM	MG Sullivan

High Mobility, Multipurpose, Wheeled Vehicle (HMMWV) Heavy Variant (HHV) with an enclosure on back used to transport personnel, repair parts, and tools to forward battlefield locations to repair disabled aircraft.

Standard Aircraft Towing System (SATS)	IV	WSM AGSE	PDRR	DSA, AMCOM	BG(P) Armbruster

Will provide a standard vehicle to safely tow all Army aircraft.

Standardized Robotic System	III	PM, JPO UGV/S	EMD	DSA, AMCOM	BG(P) Armbruster

The Standardized Robotic System (SRS) kit will be installed on existing military vehicles and will be transparent to the operator. When operated remotely, all driving and payload functions are controlled from a remote location. This insertion of new technology on existing systems allows engineer units to operate heavy machinery or other military vehicles in extremely hazardous environments.

Stinger Block I	III	PM, SHORAD	PFDOS	DSA, AMCOM	BG(P) Armbruster

Low altitude Forward Air Defense for maneuver forces against low flying fixed, UAV, cruise missile and rotary wing targets with manportable and multiplatforms.

Tactical Airspace Integration System (TAIS)	III	PM, ATC	EMD	DSA, AMCOM	BG(P) Armbruster

The TAIS is a tactical command and control system that will provide automated Army Airspace Command and Control (A2C2), improved air traffic services, airspace management services during military operations other than war (OOTW), effective battlespace synchronization and interface with air traffic services facilities of other services and other nations. The TAIS will replace the AN/TSQ-61B, Flight Control Central.

Tactical Terminal Control System (TTCS)	III	PM, ATC	PFDOS	DSA, AMCOM	BG(P) Armbruster

The TTCS is a mobile communications system that will provide Air Traffic Services (ATS) at remote landing sites, drop zones, pick-up zones and temporary helicopter operating areas. TTCS equipped units will provide ATS for aviation assets conducting operations across the entire battlefield. The TTCS will replace the AN/TSQ-97A.

Tactical Unmanned Vehicle (TUV)	III	PM, JPO UGV/S	PDRR	DSA, AMCOM	BG(P) Armbruster

The TUV is a tele-operated, state-of-the-art system enabling small units to perform remote day/night reconnaissance, surveillance, target acquisition (RSTA) and biological/chemical (BC) detection missions from protected positions. The TUV consists of a Remotely Controlled Multi-Mission Platform (RCMMP), Operator Control Unit (OCU), Mission Modules (MM), and Mission Planner (MP). The RCMMP is tele-operated forward and transports the Mission Module. The soldiers/Marines at the OCU, remaining in covered positions, will deploy the RCMMP up to 10 Km forward of friendly forces. A data link between the OCU and RCMMP allows vehicle control and the transmission of critical RSTA and BC detection information back to the operator. The TUV will support expansion of the Battalion Commander's battle space as an organic system to gather real-time battlefield information. The TUV program's Evolutionary Acquisition Strategy, along with modular design, will facilitate the horizontal technology insertion of the future mission payload packages necessary to satisfy twenty-first century requirements. TUV will be an organic battalion asset for Army and Marine Corps Infantry and Marine Corps Artillery units and will be compatible with present and future Army and Marine Corps Command, Control, Communications, Computer, and Information Systems.

Test Equipment Modernization	III	PM, TMDE	PFDOS	DSA, AMCOM	BG(P) Armbruster

The Test Equipment Modernization (TEMOD) program provides state-of-the-art general purpose test, measure-ment, and diagnostic equipment (TMDE) to meet the needs of the Army’s direct and general support maintenance units. The program was initiated in 1981 to reduce TMDE proliferation and obsolescence and to reduce TMDE support costs. The TEMOD program procures commercial or nondevelopmental items through streamlined acquisition procedures to support a wide variety of Army weapons and support systems. The near-term focus of the program is on procurement of multifunctional devices and advanced technology systems which will further reduce test equipment inventories and the associated operating and support costs.

TOW Guided Missile System - Ground Launcher	IV	WSM Missiles	PFDOS	DSA, AMCOM	BG(P) Armbruster

The TOW2 weapon system is a crew portable, heavy antitank weapon system designed to defeat armored vehicles and other targets such as field fortifications.

UC-35 Fixed Wing Aircraft	III	PM, Fixed Wing Aircraft	PFDOS	DSA, AMCOM	BG(P) Armbruster

High speed medium range fixed wing aircraft for hauling passengers and limited quantities of supplies.

Unit Maintenance Aerial Recovery Kit (UMARK)	IV	WSM AGSE	PDRR	DSA, AMCOM	BG(P) Armbruster

Provides all sling, rigging, spreader bars, and hardware needed to enable aerial recovery of any Army aircraft.

Vehicle Teleoperation Capability	III	PM, JPO UGV/S	PDRR/EMD	CG, AMCOM	MG Sullivan

Standardized Teleoperation System (STS) with platform unique actuators and software.

ORGANIZATION DSA, TACOM *Total: 191*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
12 Gauge Breaching Round	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)
Provides a 12 Gauge breaching cartridge that will defeat door lock mechanisms, hinges and padlocks on wooden doors. Supports the Soldier Enhancement Program.					
12 Gauge Non-Lethal Point and Crowd Control	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)
Provides a 12 gauge non-lethal shotgun cartridge for crowd control purposes. Two rounds will be Type Classified, one for use against multiple personnel in a crowd, the other for use against one individual. This program is in support of the Soldier Enhancement Program.					
1500 GPH Reverse Osmosis Water Purification Unit	III	PM, TAWS	EMD	DSA, TACOM	COL(P)
A future generation large scale ROWPU which is scheduled to replace the 600 GPH ROWPU. This system will be more efficient and easier to maintain.					
3000 GPH Reverse Osmosis Water Purification Unit (3K ROWPU)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)
The 3K ROWPU is self-contained, mounted onto a M871A1 trailer, and powered by a 60KW generator. In the theater of operations it is towed to an operating site by a M818 or M932 5-ton tractor. It has the capacity to produce potable water from any water source and to remove many chemical and biological contaminants.					
350 GPM POL Unregulated Pump	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)
The 350 GPM Pump is a component of the Fuel System Supply Point and the inland Petroleum Distribution System. It supports the Army's primary means of distributing and issuing petroleum to combat forces under tactical conditions.					
40 MM Canister Round for MK19	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)
Provides a 40mm Cartridge for the MK19 Grenade Machine-gun for anti-personnel capability out to 100 meters. This program is in support of the Soldier Enhancement Program.					
40mm Non-Lethal Crowd Dispersal Cartridge	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)
Provides friendly forces with a direct fire, non-shrapnel producing round with effective range of 15-30 meters and fired out of a 40mm Grenade Launcher. Program transitions to PM SA					
5.56mm Armor Piercing Round, M955	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)
An NDI armor piercing round with improved penetration capabilities over the M855 cartridge. Used in the M16A2 rifle, M4 Carbine and the M249 Machine Gun. This program is in support of the Soldier Enhancement Program.					
Adjustable Sight Bracket for	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)
Provides a common mounting interface for MK 19 Grenade Machinegun fire control devices. It adjusts to maintain line of sight to target while weapon is elevated, reducing target acquisition					
Advance Aviation Forward Area Refueling System (AAFARS)	III	PM, PAWS	EMD	DSA, TACOM	COL(P)
A lightweight modular refueling system capable of refueling four aircraft simultaneously, at a minimum flow rate of 55 GPM per nozzle.					

Airborne Stand-off Minefield Detection System	III	PM, MCD	PDRR	DSA, TACOM	COL(P)

Remote (UAV payload) system capable of detecting patterned/scatterable surface laid minefields and buried patterned minefields. It uses artificial intelligence to analyze data and transmit it to maneuver commands in near real time.

All-Terrain Crane (ATC)	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The ATC is pneumatic tired, diesel engine driven, with fully revolving superstructure and cab, and hydraulically powered telescoping boom. It will be used to perform lifting, lowering, loading, and excavation; handling general supplies, construction materials and bridging; to support maintenance, collection and classification points, rehabilitation of maintenance and communication routes, resupply points and logistic support facilities. The ATC will replace overage 20 and 25 ton cranes (rough terrain and truck mounted) in the Army inventory.

All-Terrain Lifter Army System (ATLAS)	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The ATLAS is a rough terrain forklift which has the same mobility and speed as the 6,000 lb (6K) variable reach rough terrain forklift and can perform the functions required of the current Army standard 10,000 lb (10K) rough terrain forklifts.

Anti Reflection Devices	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides the capability to reduce the visible signature from glare/glint of fielded and future direct view optics, e.g., M144 Straight Telescope, M22 Binoculars, M24 Sniper Day Scope, AN/PVS-10 Sniper Day Night Sight, M24 Miniature Binoculars. This program is in support of the Soldier Enhancement Program.

Anti-Personnel Obstacle Breaching System (APOBS)	III	PM, MCD	EMD	DSA, TACOM	COL(P)

The APOBS is a Rocket propelled/45M line charge with 108 fragmentation grenades. It is a two man portable replacement for the Bangalore Torpedo (less than 1/4 the weight).

Armored Security Vehicle	III	PM, LTV	PFDOS	DSA, TACOM	COL(P)

The Armored Security Vehicle (ASV) is a turreted, lightly armored all-wheel drive vehicle that provides ballistic protection, overhead protection and protection against landmines. The ASV accepts the MK-19 Grenade Machine Gun, the M-2 .50 caliber machine gun and the M249 5.56mm Squad Automatic Weapon (SAW) machine gun. The ASV will be transportable by C-130 and larger aircraft, rail and marine modes. The ASV will be capable of carrying four persons. The vehicle will have a diesel engine, automatic transmission, central tire inflation system and a payload of 3,360 pounds.

AT-4 Multi-purpose Weapon Trainer	IV	TACOM (ACALA)	PFDOS	DSA, TACOM	COL(P)

This ammunition is being procured to support training on the AT-4 system.

Aviation Fuel Testing Kit	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The Aviation Fuel Testing Kit is a self-contained, portable test kit used to test aviation fuels to ensure that only dry, uncontaminated fuels are used.

Barge Derrick, 100-250 Ton	IV	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

A steel constructed craft capable of off-loading cargo from existing and projected shipping through the year 2020. Will have living accommodations for 15.

Binoculars, Stabilized XM25	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

This program will provide a high power stabilized binocular for use as a surveillance and battle damage assessment device. This program in support of the Soldier Enhancement Program.

Boresights for Aimpoint and Thermal Systems (BATS)	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a small arms dry zeroing/boresighting device for thermal. infrared laser pointer and close combat optics-weapon configurations. It is desired to maximize commonality with existing M30 components.

Bunker Defeat Munition (BDM)	IV	ARDEC	PFDOS	DSA, TACOM	COL(P)

Disposable, shoulder-fired 83mm munition for neutralizing earth and timber bunker fortifications.

Canister-Launched Area Denial System (CLADS)	III	PM, MCD	PDRR	DSA, TACOM	COL(P)

Deploys a variety of non-lethal payloads from a Volcano canister to create rapidly emplaced non-lethal barriers. Uses Volcano Dispenser half rack on a HMMWV.

Carbine, M4	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

The M4 Carbine is a smaller, lighter version of the M16A2 rifle. It is a 5.56mm, gas operated, air-cooled, magazine-fed, selective rate shoulder fired weapon. It is fed by a 30 round aluminum magazine and is designed for use in close quarters. It is the fleet replacement weapon for the .45 caliber M3 submachine gun and selected M9 and M16 series weapons.

Causeway Systems	IV	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The Causeway System includes the Floating Causeway, Causeway Ferry and the Roll On/Roll Off Discharge Facility. They are powered/non-powered modular building blocks that allow movement of cargo in a Logistics Over the Shore (LOTS) environment across unimproved beaches/waterways in areas of the world where fixed port facilities are unavailable, denied or unacceptable.

Close Combat Optics, M68	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

An optic sight which enhances the combat effectiveness of the M16A2 Rifle and M4 Carbine. The sight allows the soldier to fire the weapon with both eyes open. A Soldier Enhancement Program supporting the Land Warrior Program.

Collapsible Buttstock, M5	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Provides a collapsible buttstock (CBS) for use on the M249 SAW machinegun. The CBS will enhance maneuverability in airborne and MOUT operations. In support of Soldier Enhancement Program.

Common Bridge Transporter (CBT)	III	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The Common Bridge Transporter (CBT) consists of a combination of a ribbon bridge launcher and retrieval mechanism Load Handling System (LHS) mounted on a Heavy Expanded Mobility Tactical Truck (HEMTT) chassis. The system consists of the transporter, Bridge Adapter Pallets (BAPs) and Boat Cradles. The transporter shall have the capability of transporting, launching and retrieving the fielded ribbon bridge interior bay, ramp bay, bridge erection boat, and bridge adapter pallet. The CBT shall also load/ unload and transport the Palletized Load System (PLS) NATO standard flatracks.

Compactor Hi-Speed Tamp, Self-Propelled	III	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This is a reprocurement of a Non-Developmental Item (NDI) to fill existing shortages and replace over-aged equipment in construction support units. The compactors will be self-propelled, diesel powered, tamping machines for high speed embankment compaction.

Construction Equipment Service Life Extension Program (SLEP)	III	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

This Army provides SLEP for Construction Equipment (CE). This SLEP program is expected to extend the life of CE equipment by approximately 10-15 years thus saving on overall new procurement.

Contact Maintenance Truck	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

HMMWV (CMTH)

The CMTH is a combat support system. It is a self-contained equipment package mounted on an M1097 HMMWV to form a Contact Maintenance Truck. The equipment package consists of an enclosure mounted on the HMMWV truck chassis and contains tools and equipment required for a contact maintenance team to perform limited repairs to disabled equipment onsite.

Crane, Shovel Crawler	III	PM, CE/MME	EMD	DSA, TACOM	COL(P)

The 40 Ton Crawler Crane is a piece of commercial construction equipment that, when combined with various attachments, is capable of performing a selected number of tasks in support of horizontal and vertical construction, quarry and asphalt operations, and off-shore and pier facilities in the areas of maintenance and construction by engineer port construction companies. Typical tasks are construction, repair and maintenance of forward area landing strips, heliports, logistical support facilities, port facilities, roads and bridges. The basic crane-shovel consists of a fully revolving (360 degree) superstructure with a basic 50 foot boom and a 40 ton block tackle. It is capable of being converted for use in lifting, clamshell, dragline, pile driving, wrecking ball, shovel and backhoe operations.

Crane, Truck, Warehouse	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

This crane is an industrial warehouse materiel handling crane with a self-propelled rotating and telescoping boom. It is diesel engine driven and can be used on paved or semi-paved surfaces. It is authorized TDE& TDA organizations at depots, ports and army installations. This crane can lift loads up to 10K lb..

Crushing, Screening and	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

Washing Plant (CSWP)

This item is a portable, diesel/electric powered system composed of a primary Jaw Crushing unit, a secondary crushing unit, and a tertiary washing and screening unit, delivery conveyors, power generation equipment, and all other components required to provide a complete and operational crushing and screening plant. The crushing/screening plant produces a minimum of 150 tons per hour of product suitable for base stone and concrete aggregate materials to be used in construction and maintenance of roads and airfields.

CTG, 60 mm Mortar, IR	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

Illumination XM767

A 60mm mortar infrared illumination round with M776 mechanical time fuze.

CTG, Arty 105 HERA, M913	IV	ARDEC	PFDOS	ARDEC	BG Geis

The XM913 High Explosive Rocket Assist 105mm artillery round improves light forces capability in the M119 howitzer. It increases range with improved lethality.

CTG, Arty 105 HERA, XM927	IV	ARDEC	EMD	ARDEC	BG Geis

The XM927 High Explosive Rocket Assist 105mm artillery round provides an increase in range, improved lethality and is compatible with existing howitzers.

CTG, Arty 105mm DPICM,	IV	ARDEC	EMD	ARDEC	BG Geis

XM915/XM916

CTG, Arty 105mm DPICM, XM915/XM916 are 105mm cargo ejecting projectiles. One (XM916) is for use with all 105mm howitzers. The XM915 is for use with the M119 howitzer. These enhance light force capabilities.

CTG, Mortar 120mm XM929	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

Smoke

A 120MM smoke obscurant mortar round with M745 PD fuze.

CTG, Mortar 60mm M888	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm High Explosive round with M435 PD Fuze.

CTG, Mortar, 120mm XM930	III	PM, Mortars	EMD	DSA, TACOM	COL(P)

Illumination

A 120mm illumination mortar round with M776 mechanical time fuze.

CTG, Mortar, 120mm, IR	III	PM, Mortars	EMD	DSA, TACOM	COL(P)

Illumination XM983

A 120mm mortar infrared illumination round with M776mechanical time fuze.

CTG, Mortar, 120mm, M929	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 120mm smoke obscurant mortar round with M734A1 multi-option fuze.

CTG, Mortar, 120mm, M931, Full	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

Range Training

A 120mm mortar full range training round.

CTG, Mortar, 120mm, M933 HE	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

120mm high explosive mortar round with M745 PD Fuze.

CTG, Mortar, 60mm M721	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm mortar standard white light illumination round with M776 fuze.

CTG, Mortar, 60mm M766	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60mm mortar low cost, short range practice round. Reusable (25X), eliminates sabot and separate sub-cal cartridges for each zone.

CTG, Mortar, 60mm, M720A1 HE	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

A 60MM High Explosive round with M734A1 multi-option fuze.

CTG, Mortar, 81mm M821A1	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

An 81mm mortar high explosive round w/M734 Multi-Option Fuze.

CTG, Mortar, 81mm XM816	III	PM, Mortars	EMD	DSA, TACOM	COL(P)

An 81mm mortar infrared illumination round with M772 mechanical time fuze.

CTG, Mortar, 81mm, M889A1	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

An 81mm mortar high explosive round w/M935 Point Detonating Fuze.

CTG, Mortar, M821A2	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

An 81mm mortar high explosive round with M734A1 multi-option fuze.

CTG, Mortar, M934, HE	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

120 mm high explosive mortar round with M734 Fuze.

CTG, Mortar, M934A1, HE	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

120mm high explosive mortar round with M734A1 Fuze

Deployable Universal Combat Earth Mover (DEUCE)	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The DEUCE is a high-speed, high mobility, earth-moving system capable of conducting the following activities: clearing, leveling, and excavation operations in support of mobility, countermobility, survivability, and sustained light engineering missions.

Dispenser, Mine M139	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Carries and dispenses Volcano Canister, mounted on 5-ton truck, M548 or UH-60 Helicopter.

Dual Mount MK93, Mod 1	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides improved weapon mount compatible with both the M2HB .50 cal MG and the MK19 40mm GMG. In support of Soldier Enhancement Program.

Enhanced Remote Target System (ERETS)	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The ERETS consists of infantry and armor target mechanisms, both stationary and moving and related interface and control hardware. The Range Control Station computer provides for manual and automatic control of the target mechanisms, accumulates target hit data and prints a permanent record for evaluation of trainee performance. Simulators, which add realism to the training scenarios, include the infantry night muzzle flash simulator, armor target kill simulator, and the infantry hostile fire simulator. The ERETS is installed on various range configurations to support infantry, armor and combined arms live fire training and qualification exercises.

Explosive Standoff Minefield Breacher	III	PM, MCD	EMD	DSA, TACOM	COL(P)

A joint USMC/Army Program that will be capable of clearing a breaching path across all types of minefields.

Field Artillery Ammunition Support Vehicle (FAASV)	III	PM, Paladin/FAASV	PFDOS	DSA, TACOM	COL(P)

The FAASV Materiel Change (MC) encompasses the previously approved FAASV Howitzer Extended Life Program (HELP) and Survivability Materiel Changes. The MC incorporates M109 Family of Vehicle improvements into the FAASV in order to maintain a common chassis. These improvements include the Low-heat Rejection/Cold Start Engine, improved XTG 41104 Transmission, RAM improvements to the cooling, electrical and suspension systems, relocated heater and hydraulic reservoir, stronger fuel cells, and modifications to provide interoperability with the M109A6 Paladin Howitzer. The halon-charged fire extinguisher system will be replaced with an alternate agent system. The total FAASV MC effort for 664 systems will be performed at three sites: the Letterkenny Army Depot (442 systems), Korea (50 systems) and the remainder modified at a European site yet to be determined. In July 1996, a sole source contract to United Defense Limited Partnership was awarded for new production of 48 M992A2s for fielding to the Army National Guard as the companion resupply vehicle to Paladin.

Fighting Position Excavator	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

A command detonated explosive charge that will loosen soil and thereby reduce position preparation by at least 50%.

Flash Suppressor/Blast Attenuator for M24	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Provides the M24 Sniper Weapon System with flash/blast suppression device. This program is in support of the Soldier Enhancement Program.

Forward Area Refueling Equipment (FARE)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

FARE provides forward area refueling of helicopters and aircraft and may also be used to refuel ground vehicles and to support special operational requirements. It consists of a 100 GPM, gasoline engine driven, diesel engine driven, or electric motor driven, pump and power source, a 100 GPM Filter Separator and hose, couplings, wyes and tees and sundry accessories.

Forward Area Water Point	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

Supply System (FAWPSS)

This system consists of hoses, nozzles, six 500 gallon drums and a 125 GPM pump. It is used to provide fresh water at company level near the combat zone. FAWPSS is a part of CENTCOM's near-term water supply equipment.

Fuel Handling Hoseline Outfit	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The hoseline outfit is required in Corps support units (QM POL Supply Companies and QM Pipeline Terminal Operating Companies) to pass fuel forward from Corps areas to Division areas and, if the tactical situation permits, from division areas forward.

Fuel System Supply Point	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The Fuel System Supply Point (FSSP) is the Army's primary means of distributing and issuing bulk petroleum to combat forces under tactical conditions. The system consists of: 2 ea. 350 GPM Pumps; 2 ea. 350 GPM Filter Separators; hoses, fittings, wyes and tees, and 6 ea. fabric petroleum tanks.

Ground Fuel Test Kit	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The Ground Fuel Test Kit is a self-contained, portable kit for testing ground equipment fuels for contaminants and water. It measures API gravity, viscosity, trace water and sediment in the fuels being tested.

Ground Standoff Mine Detection	III	PM, MCD	EMD	DSA, TACOM	COL(P)

System (GSTAMIDS)

Vehicle based mine detection system employing sensors on a remote teleoperated mine protected vehicle. Detects all types of anti-tank mines, supports rapid clearance of routes, and minimizes inherent risks to mine detection personnel.

Gun Laying and Positioning	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

System (GLPS)

Uses the military standard Precise Lightweight Global Positioning System Receiver, a commercial azimuth gyroscope theodolite and laser range finder in a tripod mounted configuration to determine position and orientation of every gun in the firing battery from one central location.

Handheld Stand-off Minefield	III	PM, MCD	PDRR	DSA, TACOM	COL(P)

Detection System (HSTAMIDS)

The HSTAMIDS system integrates a suite of sensors in a man portable system to locate non metallic and metallic AP and AT mines.

Heavy Dry Support Bridge	III	PM, HTV	EMD	DSA, TACOM	COL(P)

The HDSB is a 40-meter bridge that supports Military Load Capacity (MLC) 96-wheeled and MLC 70-tracked vehicle traffic along Lines of Communication (LOCs) and Main Supply Routes (MSRs). The bridge is packaged on M1077 Palletized Load System (PLS) Flatracks and is transported by the Common Bridge Transporter. The HDSB launcher is mounted on a PLS Chassis and can launch a 40-meter bridge in ninety minutes.

Heavy Equipment Transport	III	PM, HTV	PFDOS	DSA, TACOM	COL(P)

System (HETS)

This system consists of the M1000 Heavy Equipment Transporter (HET) Semitrailer and the M1070 Truck Tractor. Together, they form a system whose primary mission is to transport main battle tanks and heavy equipment. This system also has the capability to self load and unload disabled tanks.

Heavy Expanded Mobility	III	PM, HTV	PFDOS	DSA, TACOM	COL(P)

Tactical Truck (HEMTT)

The HEMTT is a diesel-powered, 8-wheel drive, tactical vehicle available in five body styles (two cargoes, wrecker, tanker and tractor). The HEMTT transports ammunition, petroleum, oils and lubricants. It is also used for recovery of other wheeled support vehicles and combat systems. Early model HEMTTs are currently being overhauled by the original manufacturer to the current production configuration. Two test bed vehicles are currently being produced in preparation for a future Extended Service Program (ESP). These vehicles will be product improved variants of the tanker and wrecker with enhancements in the areas of readiness, maintainability and safety beyond the current production configuration.

Helicopter Extended-Range Fuel System	IV	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

Allows cargo helicopters to internally transport all of the hardware and fuel required to perform tactical refueling of other aircraft in remote locations. The system is modular and can be converted to a fuel source for the transporting aircraft to allow for extended flying time.

High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) Family of Vehicles	III	PM, LTV	PFDOS	DSA, TACOM	COL(P)

The HMMWV is a lightweight, high performance, four-wheel drive, air transportable and air dropable, high mobility tactical family of wheeled vehicles. The vehicle has a diesel engine, automatic transmission and payloads of 2500 lbs. (HMMWV Group I), 3,660 lbs. (HMMWV Group II), 4,400 lbs. (Heavy HMMWV (M1097), and 5,100 lbs. (Expanded Capacity Vehicle (M1113)). The Block I, or A1 models of the HMMWV began fielding in March 1994. The A1 models have improved seating, upgraded electronics and M1097 components across the family. The A2 models will have an updated EPA compliant engine and a 4-speed automatic transmission. The Scout HMMWV is a specially modified armament carrier to accommodate the Scout mission role. The Up-Armored HMMWV (M1114) ballistic protection against anti-tank and anti-personnel mines (up to 12 pounds of TNT) and 360 degree protection aginst 7.62 armor piercing munitions. The Expanded Capacity Vehicle (ECV) (M1113) will be used for other programs where the M1097 has insufficient capacity. The A4 model is expected to be available starting in FY02/03 to enable the HMMWV to meet the light vehicle requirements for Vision XXI.

High Mobility Trailer (HMT)	III	PM, LTV	PFDOS	DSA, TACOM	COL(P)

The High Mobility Trailer (HMT) is a family of high mobility companion trailers for the High Mobility Multipurpose Wheeled Vehicle (HMMWV). The HMT is compatible with both the light (Group I/II) and heavy (Group III) HMMWV variants. These HMMWV variants require a HMT family of trailers (light, heavy and heavy chassis) make full use of the HMMWV's towing capabilities.

Hydraulic Excavator	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The Hydraulic Excavator (HYEX) is a commercial off the shelf item of construction equipment. The HYEX is a track mounted, hydraulic controlled, excavating system with a quick disconnect coupler system which allows it to use a variety of different construction attachments. Three types will be procured, Type I - equipped for use in general digging, trenching, loading, and lifting operations; Type II - equipped with a rock drill and a bucket for use in quarry operations. Type III will be a heavy excavator with attachments for use in heavy duty quarry operations.

Hydraulic/Electric Engineer Tool Outfit	IV	TACOM (ACALA)	PFDOS	CG, AMCOM	MG Sullivan

Formerly the Pioneer Tool Outfit (PTO), is an assembly of 102 components used in the engineering, construction, and repair of combat facilities. It contains both electric and hydraulic tools, and is powered by a DED hydraulic power unit and tools powered by a portable hydraulic motor generator (PHMG).

Improved Buttstock for M4	IV	TACOM (ACALA)	EMD	TACOM (ACALA)	Mr. Morgan

Provides the rifleman with an ergonomically optimized buttstock for the M4 Carbine. This program is in support of the Soldier Enhancement Program.

Improved Mortar Ballistic Computer XM30	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

Improved Mortar Ballistic Computer, XM30 replaces M23 MBC, computes firing data for all mortar systems and enhances "shoot and scoot" capability.

Improved Ribbon Bridge (IRB)	III	PM, HTV	EMD	DSA, TACOM	COL(P)

The IRB provides the combat engineers with a much more capable Improved Common Bridge Transporter (ICBT) and ribbon bridge bays (interior and ramp) with 70 ton capability. The new ICBT will transport the Heavy Dry Support Bridge (HDSB) as well as other bridging assets.

Inland Petroleum Distribution System (IPDS)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

IPDS is a rapid deployment, general support, bulk fuel storage and pipeline system. It is made up of fuel units, pipeline connection assemblies, pipeline pump stations, pipeline sets and special purpose equipment. The system also includes facilities, software, training, and planning documentation. The system is modular in design and can be tailored for specific locations and operations. The IPDS provides bulk fuels support to military forces when deployed worldwide. As Operational Projects Stocks, IPDS supports Unified Command contingency plans during execution.

First Previous Next Last

Intelligent Combat Outpost (Raptor)	III	PM, MCD	PDRR	DSA, TACOM	COL(P)

Autonomous Command and Control System that uses advanced acoustic sensors to provide real time targeting data and increased situational awareness. Will enhance effectiveness of Wide Area Munition and other munitions/demolition devices through coordinated attack and elimination of the need for overwatch forces.

Interim Vehicle Mounted Mine Detector (IVMMD)	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

IVMMD is a vehicle mounted mine detection system on a survivable vehicle platform.

IR Illumination Hand Grenade	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

The IR illuminating Hand Grenade will reduce visible signature for signalling and it will illuminate buildup position for NVDS. Supports the Soldier Enhancement Program.

Items Less Than $2M	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

Five different pumps ranging from 65 GPM to 650 GPM, fabric tanks ranging in capacity from 3,000 to 50,000 gallons, and various water storage configurations ranging from 20K to 800K gallon capacity. Designed to store and distribute fresh drinking water to all US or Allied forces operating in support of military or humanitarian operations.

Joint Service Combat Shotgun	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

JSCS is a 12 Ga semi-automatic shotgun with an effective range of 40 meters. It is compatible with standard ammunition and will manually cycle current Non-lethal munitions. This program will adopt this shotgun for use wqithin the Army. Supports the Soldier Enhancement Program.

Launched Grapnel Hook (LGH)	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

This is a Soldier Enhancement Program funded man-portable, bullet trap launched grapnel tethered to a launch point. It replaces the hand thrown grapnel in trip wire clearance operations.

Lightweight Arctic Forward Area Refueling Equipment (LAFARE)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The LAFARE is a two point tactical refueling system specifically designed for operation in extreme cold environments (-60 degrees F). It consists of a gas turbine engine driven pump unit, two filter separators, two insulated batteries, and three 500 gallon arctic fuel drums. In operation, the system will simultaneously refuel two pieces of equipment at a minimum flow rate of 50 GPM and a maximum of 90 GPM flow rate at any one nozzle. Emphasis is placed on limiting the component/module weight to the two soldier portable weight limit. This is a P3I aimed at reducing the weight of the Arctic Forward Area Refueling Equipment (AFARE).

Lightweight Fragmentation Grenade	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a light weight (approx. 1/3 reduction of current weight) fragmentation hand grenade to the soldier. A Soldier Enhancement Program supporting the Land Warrior Program.

Lightweight Water Purifier (LWP)	III	PM, PAWS	EMD	DSA, TACOM	COL(P)

LWP provides fresh drinking water to companies operating near the combat zone in harsh and arid environments. It is designed to produce up to 125 GPH of fresh drinking water.

Long Range Sniper Rifle	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Type classifies and fields a long range sniper rifle with counter sniper and anti-materiel effectiveness. Supports the Soldier Enhancement Program.

Long Range Tactical Sniper Cartridge	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides Caliber .50 match-grade cartridges for the long range sniper weapon with an effective range out to 1500 meters. Supports the Soldier Enhancement Program.

M1022A1 Dolly Set, Transportable Shelter, 7 1/2 Ton	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M1022A1 provides rapid mobility for International Standard Organization (ISO) containers and military shelters. A dolly set is comprised of two separate and independent halves, a front half and a rear half. Each half can easily and quickly be attached to the ends of a shelter or container which is positioned on the ground, making up a trailer (a Container Loading Trailer, or CLT). Using dolly set power, the trailer can be raised to traveling height, attached to a tow vehicle, and moved to a new destination.

M105A3 Cargo Trailer, 1 1/2 ton, 2 wheeled	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M105A3 is a two-wheeled, 1 1/2 ton cart-type trailer which is used to transport general cargo over highways as well as cross-country terrain. It is capable of fording hard-bottomed water crossings. The trailer is Roll-on/Roll-off capable and is fitted with radial tires. This trailer is an integral part of the following systems: AH-64, CH-47D, Woodworking Shop, MSE, MLRS, HAWK, Patriot, M20 NBC Decontamination system and the DS2 Pump/Scrub Decontamination system. It is also used throughout the Army to haul general cargo.

M1061A1 5-Ton, 4-Wheel, Flatbed Trailer	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M1061A1 mounts fuel pods (Tank Unit, Liquid Dispensing (TULD)), laundry units, and 100 kW generators. It is towed by the 5-ton M809 series of tractors.

M1062 Semitrailer	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M1062 Semitrailer was developed to haul 7,500 gallons of petroleum products in the Communication Zone (COMMZ) and corps rear areas. The commercial M1062 semitrailer is designed to transport/dispense bulkhaul gasoline, diesel and aviation fuels. It has a bottom and top-loading capability and uses a standard 4-inch camlock coupling and NATO D-1 coupling. The tank contains a jet level sensor system which senses the fuel level in the tank. When filling the tank from the bottom, it automatically shuts off when the tank is full. Fuel discharge is accomplished using gravity or an off-line pump with the emergency shutoff. The system also has a vapor recovery system. It is towed by the M915 series tractors.

M109A6 Paladin	II	PM, Paladin/FAASV	PFDOS	CG, TACOM	MG Caldwell

The M109A6 applies a series of modifications to the current M109A2/A3 Howitzer. It is a self-propelled, fully tracked, diesel powered, aluminum armored, turreted, air transportable weapon system able to carry a minimum of 37 complete, conventional rounds and two oversized projectiles on-board. Its main armament consists of a modified version of the M185 cannon assembly (M284) and M178 gun mount (M182A1). The cannon, propelling charge, and projectile mix permit unassisted ranges of at least 22 km and a maximum assisted range of 30 km. A new turret structure facilitates integration of the various turret improvements and Vulnerability Reduction Measures (VRM's), and improves overall crew compartment layout and space.

M113 Carrier Mod-Vehicle A3 Upgrades	III	PM, M113/M60	PFDOS	DSA, TACOM	COL(P)

The M113 Family of Vehicles provides essential transport for troops, antitank weapons, air defense systems, electronic warfare shelters, mortars, command centers, and cargo. The current fleet will be required for at least 20-30 more years and must be continuously modified to enhance performance, reliability, survivability, and supportability. The M113 FOV consists of the following vehicles: M113, M577, M548, M901, M981, M1059, M1064, M1068, M58 and opposing forces surrogate vehicle.

M129A4 Tactical Transport Semitrailer Van	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M129A4 is a 12 ton, 35 foot, four wheel, multipurpose van used by various types of support units engaging in the storage, transportation, and issue of military supplies. The van will house sophisticated electrical equipment (radio and computerized) for command post communications, and spare parts and maintenance tool shop for field repairs. It is towed by 5-ton, 6x6 truck tractor or similar vehicle equipped with a fifth wheel.

M16 A4 Rifle	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Th M16A4 rifle is an improved version of the M16A2 rifle. The improvement consists of a flat top upper receiver accessory rail, and a detachable handle/rear aperture sight assrembly that allows for easy attachment of accessories such as Night Vision Devices.

M203/M4 Compatibility	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides a method of mounting the M203 Grenade Launcher on the M4 Carbine. This program is in support of the Soldier Enhancement Program.

M240B Armor Machine Gun, 7.62mm	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

The M240B is being procured to provide dismounted infantrymen with a more reliable, accurate and lethal machine gun to suppress and destroy enemy personnel, lightly armored vehicles and fortified positions. It is a gas-operated, air-cooled, link-belt fed weapon which allows for rapid barrel changes and incorporation of a flash suppresser. The M240B will replace the M60 Machine Gun in light infantry, mechanized infantry and combat engineering units.

M2HB Quick Change Barrel	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides an NDI commercially available kit to convert M2HB Machine Gun to a fixed headspace, quick change barrel configuration.

M30 Improved Mortar Ballistic Computer	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

The M30 is a militarized laptop computer which computes ballistic trajectories and gives mortar gunners data for elevation and change to bring effective fire.

M6(M998) and M197(M1025) HMMWV Machine Gun Mounts	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides the capability to mount M249 and M60 machine guns on the M998 and M1025 HMMWV for improved self-protection. The mounting system includes the pedestal, pintle, and travel locks. Supports the Soldier Enhancement Program.

M860A1 Semitrailer	III	Trlr Mgmt Ofc	PFDOS	DSA, TACOM	COL(P)

The M860 series semitrailer is used with the PATRIOT missile system. The M860A1 is a flatbed gooseneck semitrailer equipped with a fail-safe air brake system and manually adjusted landing legs. The prime mover is a HEMTT 10-ton truck tractor. The M860A1 is also equipped with a stabilization system consisting of our legs that are used to emplace the semitrailer during missile launching operations.

M870A2 Semitrailer	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M870A2 Semitrailer lowbed will be a 40 ton system capable of handling payload up to 80,000 lb.. on highway, gravel roads, dirt roads, level cross country, and hilly cross country. The M870A2 will incorporate a fixed gooseneck, rear loading capability and automatic slack adjusters. The M870A2 will be a multi-axle suspension system equipped with radial tires. The M870A2 will connect to its prime mover's fifth wheel via a reversible king pin (2 and 3.5 inches capable). The landing legs will be adjustable to accommodate varying degrees of fifth wheel heights. The semitrailer will utilize a 12/24 volt electrical system including two composite lights, which serve as blackout and service tail and stop lights.

M871A3 Semitrailer FB BB/Cont Trailer	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M871A2 is a 22 1/2 ton semitrailer, dual purpose, bulk container transporter. The semitrailer will be used within the military logistical support system within CONUS and OCONUS theaters to transport 20' International Standard Organization (ISO) Containers on line haul tactical missions and as the primary means of distributing containers and bulk cargo. It will be employed with military standard 5 ton tractors for use over primary, secondary, and unimproved secondary roads.

M878 Yard Tractor	III	PM, TAWS	EMD	DSA, TACOM	COL(P)

The yard type truck is primarily used to provide a capability to shuttle semitrailers loaded with containers or breakbulk cargo within fixed ports, on prepared beaches during Logistics-Over-The-Shore (LOTS) operations, and in trailer transfer areas. The vehicle is a highly maneuverable commercial tractor with an automatic locking, hydraulic-lift fifth wheel which facilitates semitrailer coupling and disengagement and allows movement of the semitrailer/chassis without retracting the landing legs. It is capable of moving trailers weighing from 21,000 to 60,000 lb..

M9 Armored Combat Earth Mover Mod Program	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M9 is a highly mobile, fully tracked, armored earthmover capable of supporting forces in both offensive and defensive operations. It performs critical combat engineer tasks such as digging hull defilade fighting positions, breaching berms, and preparing anti-tank ditches. There are several planned modification programs for the M9 under the nomenclature Systems Improvement Plan (SIP). The SIP Phase 3 consists of ten hardware improvements designed to enhance the readiness of the ACE. Phase 4 is in planning for possible application in FY02 or beyond.

M903, M962, .50 Cal SLAP	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

A caliber .50 round designed to maximize the effectiveness of the M2 machine gun in the engagement and defeat of lightly armored targets. This program provides a companion tracer round. Supports the Soldier Enhancement Program.

M915A3 Truck	III	PM, TAWS	EMD	DSA, TACOM	COL(P)

The M915A3 tractor is a Non-Developmental Item vehicle which serves as the prime mover for either the M872 34 ton flatbed semitrailer or the M106 7500 gallon tanker. These tractor semitrailer combinations carry all types of bulk cargo, containers and fuel and operate primarily over roads in the communication zone and Corps areas of operation in all weather conditions. The M915A3 truck tractor is transportable by highway, rail, marine, and air modes worldwide.

M916A2 Truck	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M9162A2 truck tractor is a Non-Developmental Item vehicle which serves as the prime mover for the M870/M870A1 40 ton lowbed semitrailer and the 6,000 gallon water tanker. The tractor is a 6x6, 68,000 Gross Vehicle Weight vehicle with a 3 1/2 inch fully oscillating fifth wheel and 45,000 lb. rear mounted winch. The tractor lowbed and water tanker semitrailer combinations transport all types of heavy engineer equipment and non-portable water in support of engineer construction operations over primary, secondary, and off-roads in all weather conditions. The M9162A truck tractor is transportable by highway, rail, marine, and air modes of transportation.

M917A1 Truck, Dump 20T	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M917A1 dump truck is a Non-Developmental Item used to load, transport and dump payloads of sand and gravel aggregates, crushed rock, hot paving mixes, earth, clay, rubble, and large boulders at engineering and construction sites under worldwide climatic conditions in a military environment. It has a heavy duty steel, 18.5 ton, 12 cubic yard struck and 14 cubic yard heaped capacity dump truck, in cab controlled double controlled action hydraulic hoist system capable of a 50 degree tilt angle, 8 inch removable sideboards, easy wind tarpaulin system and air actuated tailgate lock. The M917A1 dump truck is transportable by highway, rail, marine, and air modes worldwide.

M939A2 5-Ton Truck Series Mod Program	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M939A2 is a general purpose truck used to haul cargo, ammunition and personnel. The modification program is to prevent the fuel tank from venting into the vehicle air intake. It will vent into the atmosphere preventing the possibility of uncontrolled engine run-on and engine destruction.

M967A1 Bulkhauler	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The low profile, bulkhaul semitrailer has a stainless steel, single compartment tank of 5,000-gallon capacity, plus 3% for product expansion. It is designed to transport/dispense gasoline, diesel, and aviation fuels. The vehicle is air transportable when empty on the C130, C141, or C5A aircraft. It is towed by the 5-ton Truck Tractor.

M969A2 Semitrailer, Tank, 5000 Gallon Automotive Refueler	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The M969A2 is used primarily for transporting and dispensing automotive fuel. The trailer has a stainless steel, single compartment tank of 5000 gallon capacity, plus 3% capacity for product expansion. This system can deliver 100 gallons/minute and can be lifted, fully loaded, on and off ship. It is air transportable on C130, C141 or C5A aircraft. It is towed by the 5-ton truck tractor.

M993, 7.62mm Armor Piercing Cartridge	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides a 7.62mm Armor Piercing Cartridge for the M60 and M240B Machine Guns and the M24 Sniper Rifle. Supports the Soldier Enhancement Program.

Machine Gun Optics	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Telescopic sight for the M249, M60 and M240E1 machine guns. In support of Soldier Enhancement Program.

Machine Gun, 5.56, M249, Squad Automatic Weapon	III	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The M249 Squad Automatic Weapon provides a lightweight, one-man portable machine gun capable of delivering a large volume of effective fire to support infantry squad operations.

Machine Gun, Grenade, 40mm: Mk19 Mod 3	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Anti-Personnel/Anti-Light Armor Automatic Grenade Launcher. It uses linked ammunition and fires from the open bolt mode using a modified blow-back type mechanism. The weapon is designed to fire 40mm high velocity series grenade rounds and can be either ground or vehicle mounted.

Mobile Water Treatment	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

This project will develop a system to collect and treat wastewater generated in the field. Treatment of waste from hospitals, laundry and bath, and ROWPU operations is aimed towards control of disease and reduction of negative health effects of contaminated wastewater.

Modern Mount	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

The Modern Mount provides quick and easy movement for traversing and elevation, reduces looseness between weapon and mount, and provides safe, bold and accurate fire on targets at all engagement ranges for Heavy Machine Guns.

Modernized Demolition Initiatives (MDI)	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Modernized Demolition Initiatives (MDI) is an expendable non-electric initiation system that utilizes shock tube to transmit initiation signals to explosives and demolition devices.

Modular Base Petroleum Laboratory	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

A highly mobile petroleum lab used to test the quality of military petroleum products. The system is housed in two 40 foot semi-trailers which can be rapidly deployed to an area of operations anywhere in the world. This capability eliminates the need for building or leasing fixed base facilities.

Modular Crowd Control Munition (MCCM)	III	PM, MCD	PDRR	DSA, TACOM	COL(P)

Less than Lethal means of breaking up large groups of hostile personnel. Provides incapacitation of personnel through robust flash-bang and stinging rubber balls. Capable of being mounted on vehicles with special mounting bracket.

Modular Weapon System	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Provides a system of mounting rails/methods for Rifles/Carbines Attaching Sights, and Accessories. Allows combat commander to custom configure weapons based upon mission needs. Key vcomponent of Land Warrior Lethality.

Mortar Fire Control System	III	PM, Mortars	EMD	DSA, TACOM	COL(P)

Mortar Fire Control System (MFCS) is a digitized fire control system that includes a fire control computer, position navigation, and gun pointing. MFCS integrates mortar platoons into the current and future fire support command and control architecture.

Mortar, 120mm, Weapon System, M121	III	PM, Mortars	PFDOS	DSA, TACOM	COL(P)

The M121 Mortar Weapon System is a 120mm mortar system mounted in the M1064/M1064A3 carriers.

Mount, GMG, MK64, Mod 9	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

Material change to the mount for the 40mm, anti-personnel/anti-light armor automatic grenade launcher, which improves accuracy of the MK64 mount. Supports the Soldier Enhancement

Multiple Magazine Holder	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

Provides a clip to attach two magazines together which reduces the time needed for the soldier to change magazines. This program is in support of the Soldier Enhancement Program.

Muzzle Velocity System	IV	TACOM (ACALA)	PFDOS	TACOM (ACALA)	Mr. Morgan

The Muzzle Velocity System measures muzzle velocity of cannon artillery projectiles, replacing the M-90 Velocimeter. The M93 version is for the Paladin and the M94 version is for all other conventional artillery weapons.

Non-Lethal 40mm Cartridge	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

A 40mm non-lethal cartridge for use with the M203 grenade launcher. It will provide a less than lethal means of crowd control. This program is in support of the Soldier Enhancement

Nuclear Tester	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

This tester is used to measure the density and moisture levels of soils and asphalt samples by engineer construction units. It contains radio-active materiel, is serial number controlled, and managed under nuclear regulatory commission license granted to TACOM.

Objective Individual Combat Weapon (OICW)	III	PM, Small Arms	PDRR	DSA, TACOM	COL(P)

The OICW will demonstrate the next generation Infantry weapon with modular, dual barrel that combines the lethality of a 20mm air-bursting munition, 5.56mm NATO ammunition and a full solution fire control system. The air-bursting munition will be capable of defeating targets in defilade at a standoff range of 1000 meters. OICW is thlethality block upgrade to the Land Warrior Program. This program will transition to PMSA 1QFY00

Packaged Water System (PWS)	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

The Packaged Water System will be used to resupply combat forces with drinking water during early entry and prior to arrival of Combat Service Support Units. It will also be used to resupply troops in an NBC environment and reduce reliance on host nation support.

Palletized Load System	II	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The Palletized Load System (PLS) consists of a 16.5-ton payload prime mover (10x10) with an integral load-handling system, which provides self-loading and unloading capability; a 16.5-ton payload trailer; and demountable cargo beds, or flatracks. The PLS performs line haul, local haul, unit resupply, and other missions in the tactical environment to support modern and highly mobile combat units. The PLS truck is equipped with a central tire inflation system (CTIS), which significantly improves off-road mobility. An intermodal flatrack with enhanced transportability, stacking and deployability has been in production since FY95. The Containerized Roll-in/Out Platform (CROP), an A-Frame flatrack which fits inside a 20-foot International Standards for Organization (ISO) Container, was acquired in FY97. The PLS is a primary component of the Maneuver Oriented Ammunition Distribution System (MOADS) in support of field artillery. The PLS will allow interoperability with the comparable British, German and French systems, through the use of a common flatrack. A flatrack-to-truck ratio of 10:1, in theater, has been determined to be the minimum requirement to support MOADS. A container handling unit (CHU) will be fielded to transport 20-foot ISO containers without the use of a flatrack.

Palletized Load System (PLS) Bituminous Distributor Module	III	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The M1075 PLS Bituminous Distributor module is a Non-Developmental Item which is detachable from the M1075 PLS truck. It has a 2,800 gallon capacity for hot bitumen and is independently powered by a powered pump. It is used to deliver liquid bitumen for road and airfield construction. The M1075 PLS truck and M1076 PLS trailer are transportable by highway, rail, marine, and air modes.

Palletized Load System (PLS) Truck Concrete Mobile Mixer Module, 8 CU YD	III	PM, HTV	PFDOS	DSA, TACOM	COL(P)

The PLS concrete mobile module is a Non-Developmental Item module which is detachable from the M1075 PLS truck and is used to manufacture, transport, and pour concrete. It has a special 8 cubic yard capacity body with compartments for water, sand, gravel, and cement. Cement products are loaded from the top and flow to a chute for mixing and distribution out the rear of the vehicle. The system is powered independly from the PLS truck and is able to be transported by the M1076 PLS trailer. The M1075 PLS truck and M1076 PLS trailer are transportable by highway, rail, marine, and air modes.

Penetration Augmented Munition (PAM)	III	PM, MCD	EMD	DSA, TACOM	COL(P)

Manportable multi-stage munition that attaches to and defeats large reinforced bridge piers.

Personal Defense Weapon, 9mm	IV	TACOM (ACALA)	PFDOS	CG, TACOM	MG Caldwell

Standard issue hand gun, replaces the 45 cal. and 38 cal. hand guns.

Petroleum Quality Analysis System (PQAS)	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

PQAS is a highly mobile, transportable, modern laboratory for on-site testing and analysis of all common military fuels acquired from a variety of sources. The PQAS is lightweight, compact and sufficiently rugged to allow transporting on and operating from a HMMWV. The PQAS is operated on the extended battlefield and will accommodate all tests necessary to determine fuel quality. This system will replace the Airmobile Petroleum Laboratory.

Petroleum Quality Surviellence Laboratory (PQSL)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This mobile lab provides quality surveillance testing under field conditions and also has a limited capability to perform procurement acceptance testing of petroleum products.

POL 10,000 Gallon Fabric Tank Assembly	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This is a separately authorized component of the Fuel System Supply Point and also serves as an auxiliary tank for special operations.

POL 20,000 Gallon Tank	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 20.000 Gallon POL Tank Assembly is a separately authorized component of the FSB and also serves as an auxiliary tank for special operations.

POL 3000 Gallon Fabric Tank	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 3000 Gallon Fabric Tank is an associated item of the Modular Fuel System Supply Point which is in the development stage and is an upgrade of the current Fuel System Supply Point. It is also authorized in some combat support units.

POL 350 GPM Filter Separator	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 350 GPM Filter Separator has multiple uses with its main application to the fuel System Supply Point. Other uses include support to the HEMTT Aviation Refueling System and refueling on the move. It supports the Army's primary means of distributing and issuing usable petroleum to combat forces under tactical conditions by filtering sediment and water from the fuel.

POL 350 GPM Pump (Regulated)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 350 GPM Pump (Regulated) is a multi-purpose pump with its primary application to the hoseline outfit. It supports the Army's primary means of distributing and issuing petroleum to combat forces under tactical conditions.

POL 50 GPM Pump	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 50 GPM Pump is an auxiliary/utility pump required in all types of Army units for multiple usage. This includes drawing fuel from storage tanks and from collapsible or 42-gallon metal drums. It also has general use in unit, battalion, and higher support units.

POL 50,000 Gallon Fabric Tank Assembly	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 50,000 Gallon Fabric Tank Assembly is a separately authorized component of the Fuel System Supply Point, Inland Petroleum Distribution System, and also serves as an auxiliary tank for special operations.

POL 600 Gallon Trailer Mounted Tank Unit	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The 600 Gallon Trailer Mounted Tank Unit is a component of the high profile Tank and Pump Unit (Truck Mounted), Tank Unit, Liquid Dispensing for Trailer Mounting and also issued as a separate or replacement item.

POL Items less than $5M	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The equipment procured with this "basket" program supports the Army mission of providing bulk petroleum fuel distribution to all DoD level based forces in a theater of operations. The program includes a wide variety of low unit cost, high usage items such as POL tanks, pumps, test equipment and storage and distribution systems. Each has an annual procurement of $2M or less.

Precision Guided Mortar	III	PM, Mortars	PDRR	DSA, TACOM	COL(P)

Precision guided Mortar Munition 81mm and 120mm autonomous anti-tank mortar munitions utilizing state of the art technologies.

Pusher Tug, Small	IV	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

A steel hull craft, 61 ft. long, twin propulsors w/twin diesel inboard drive, 5 berths, dinette, 2 diesel generators, whose mission is to provide towing of LASH and general barges in harbors, inland waterways, and along coastlines.

Radiological Water Monitor	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

This program covers the development of a system which will be able to measure radioactivity in raw and product water to determine if radiation health criteria are being met. Currently the Army does not have adequate capability to monitor raw and product water for the established levels of radioactivity. The system has to be able to measure 1000 picocuries per liter against a background gamma radiation level of up to 100 milliroentgen per hour. The system will be used by Quartermaster Units to select raw water sources and by Preventive Medicine teams to approve water for potable uses.

Rail Adapter System (RAS), XM4/M5	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

This system provides a mounting surface for M16 rifles and M4 carbines which will allow attachment of day and night sights and other accessories. A Soldier Enhancement Program supporting the Land Warrior System.

Ranger Anti-Armor, Anti-Personnel Weapon System (RAAWS)	IV	ARDEC	PFDOS	DSA, TACOM	COL(P)

The Ranger Anti-Armor, Anti-Personnel Weapon System is an 84mm recoilless rifle and family of ammunition designed to defeat lightly armored targets, personnel and field fortifications.

This NDI effort is specifically for the SOF-Rangers.

Remote Activated Munition System (RAMS)	III	PM, MCD	EMD	DSA, TACOM	COL(P)

Lightweight transmitter/receiver that is compatible with demolition munitions and other Special Operations Force equipment.

Remote Mount/Common Remotely Operated Weapon System (CROWS)	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

A remote vehicle mounting system for heavy and medium machine guns MK 19 GMG, .50 Cal M2, M240, and Objective Crew Served Weapon (OCSW). Improved system accuracy and operational response time. Modular, open architecture will readily allow future improvements.

Rifle Launched Non-Lethal Munition	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a muzzle launched cartridge for the M16A2/A4 rifle and the M4 carbine for use in non-lethal crowd control. Supports the Soldier Enhancement Program.

Rough Terrain Container Crane (RTCC)	III	PM, TAWS	EMD	DSA, TACOM	COL(P)

The RTCC is a diesel engine driven vehicle with pneumatic tires, all wheel drive/steer carrier, and a superstructure with a hydraulically operated telescoping boom capable of 360 degree rotation while loaded. This program supports units identified in the Logistic Unit Productivity Study. The RTCC will replace the 50,000 lb Rough Terrain Container Handler in GS ammo units and the 140 ton crane in Terminal Transfer Units.

Rough Terrain Container Handler (RTCH)	III	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

This acquisition is a re-procurement and will be procured as a non-developmental item. The 50K Rough Terrain Container Handler (RTCH) can stack 8 foot wide, 20 & 40 foot long ISO containers two high as well as handle 50K conventional forklift loads if equipped with fork tines. The vehicle is diesel engine driven and was engineered by combining a commercial chassis designed for rough terrain operations with a commercial forklift mast and container handling top attachments. The RTCH is four wheel drive and capable of fording up to 5 feet in saltwater. It is used by Transportation Cargo Transfer Companies, Transportation Terminal Service Companies, and General Support Ammunition Companies to transfer containers from the ground to waiting transportation, or from one mode of transportation to another. The RTCH mission requirements have expanded from depots, OTS airfields, rail yards, and sea ports to beach operations and Corps, Division, and Bridge forward support areas.

Rough Terrain Container Handler Rebuild Program	III	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

The Rough Terrain Container Handler (RTCH) is used to stack either 20 ft. or 40 ft. ISO container weighing up to 50,000 lb.. These RTCH's are 15 years old. The rebuild program, which brings the vehicles back to their original performance specifications, is expected to extend the service life by 10 years and will yield cost savings over a new acquisition.

Scoop Loader	III	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

Scoop loaders (4-1/2 to 5 cu. yd capacity) are diesel engine driven 4X4 versatile items of equipment with rear axle oscillation and articulated frame steering. They are primarily used for loading trucks in rock quarries and after excavating earth, loose rock or sand.

Scraper, Elevating Self-Propelled, 11 CU YD	III	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

This scraper is used by Airborne/Airmobile Combat Engineering Units for earthmoving work, such as construction and maintenance of roads and airfields. The unit has been sectionalized into two sections for external air transport by helicopter.

Scraper, Elevating Self-Propelled, 14 - 18 CU YD	III	PM, CE/MHE	EMD	DSA, TACOM	COL(P)

This scraper is used by Heavy Combat Engineering Units for earthmoving work, such as construction and maintenance of roads and airfields.

Selectable Lightweight Attack Munition (SLAM)	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Lightweight (2.2 lb.) munition that will defeat a variety of targets with 4 modes of operation (magnetic bottom attack, passive infrared side attack, time demolition, command detonation)

Simulators, Threat Que, M25/M26/M27/M79	IV	TACOM (ACALA)	PFDOS	CG, TACOM	MG Caldwell

Series of computer/radio controlled firing fixtures providing cues from simulated threat vehicles during heavy armor firing practice.

Small Arms Fire Control System	III	PM, Small Arms	EMD	DSA, TACOM	COL(P)

Provides a full solution fire control with day/night sight and laser ranging capability. It will dramatically increase first round hit probability of the MK19 Grenade Machine Gun. Supports the Soldier Enhancement Program.

Small Mobile Water Chiller	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

The Small Mobile Water Chiller is a self-contained, skid-mounted, single pass water chiller. The main components consist of a diesel engine, compressor, condenser heat exchanger (evaporator) and water pump. It cools fresh drinking water for companies operating near the combat zone in harsh and arid environments. The SMWC is part of CENTCOM's Near Term Supply Equipment.

Special Operations Force Demo Kit	III	PM, MCD	EMD	DSA, TACOM	COL(P)

Kit consisting of state-of-the-art warheads and demolition attaching material to provide capability to construct special purpose demolitions.

Standard Army Refueling System (SARS)	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

Standardize refueling equipment that will adapt to all tactical vehicles and ground support equipment. Capable of refueling tactical vehicles in a minimum of two minutes at flow rates up to 300 GPM. The nozzle and receiving system would regulate flow and pressure, return vapor to the supply tank, and allow filling multiple tanks from one source. The current design is based on a pressure manifold type equipment fuel system, limiting the internal pressure to 18 psig on all hardware and the fuel system manifold. This nozzle and receptacle design will increase refueling rates, reduce hazards associated with "hot" refueling, reduce the possibility of fuel contamination and reduce the detection signal of the vapor plume generated during refueling.

T-9 (D7 Bulldozer)	III	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

The D7 is a fully tracked, low speed, medium drawbar pull bulldozer with a ripper or winch. It is used by engineer units for all types of horizontal construction projects such as roads, airfields, and emplacements.

Tactical Fuel Storage and Distribution System	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

A system of components (pumping assemblies, filtration systems, hose valves and fittings) lighter in weight, yet with the same efficiency, designed to use fewer people for set-up and

Tactical Water Distribution	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

This system enables water to be disbursed over a ten mile or any multiple of ten miles through a hoseline/pump entity. It is used with water storage distribution systems or with the 150,000GPD ROWPU.

Tank Assembly, Fabric, Collapsible POL 10,000 gal	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

A large container fabricated of elasto-meric coated nylon used to store fuel (10,000 gal capacity).

Tank/Pump Unit Liquid Dispensing (TULD)	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

TULD is the Army's primary system to transport and dispense a second type of fuel (MOGAS or diesel) on the battlefield. This liquid dispensing tank/pump unit consists of a 500 or a 600 gallon tank, tie down kit, storage boxes, and ancillary equipment to refuel and dispense fuel from the system. It is designed for mounting on the M1061A 5-Ton trailer.

The HEMTT Tanker Refueling System (HTARS)	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

HTARS is a refueling system that allows the HEMTT tanker to refuel four aircraft simultaneously. It consists of lightweight, collapsible fabric hose; closed circuit, open port and under-wing nozzles; and quick disconnect sexless, dry-break couplings and wyes and tees.

Time Delay Firing Device (TDFD)	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Small/lightweight/expendable demolition device, extremely accurate and programmable from 5 min to 30 days. Replaces current M1 family of chemical delay devices.

Tractor, T-5	III	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This is a light bulldozer that is airmobile, airdropable and helicopter transportable. It is used in airborne operations for construction and maintenance of emplacements, roads and airfields.

Tractor, Wheeled Warehouse	III	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This is a self-propelled diesel engine driven towing tractor, capable of towing loads up to 4,000 pounds. It is used primarily to pull tractor loads of break bulk commodities in warehouse, depots and terminal operations.

Truck, Forklift, DED, Rough Terrain, 4000 lb Capacity (4K RTFL)	III	PM, TAWS	PFDOS	DSA, TACOM	COL(P)

Diesel engine driven 4,000 lb capacity forklift with off-road and fording capabilities. It is designed to enter, stuff and unstuff the Army's family of 8X8 containers using the mobile ramp where necessary. These vehicles are used by terminal transfer units, maintenance support units, supply and services units and general support units.

Truck, Forklift, Warehouse	III	PM, CE/MHE	PFDOS	DSA, TACOM	COL(P)

This forklift truck is clean burning diesel engine driven, has solid rubber tires, front wheel steering, and a hydrostatic transmission with a maximum speed of 8 mph. It is used in general warehouse operations that have sufficient ventilation for removal of contaminated air. It can lift loads up to 6k lb.. The vehicle is limited to use on paved or other improved surfaces.

Vibratory Roller	III	PM, CE/MME	PFDOS	DSA, TACOM	COL(P)

The Vibratory Roller is intended to compact various types of cohesive and non-cohesive soils, and consolidate sand, gravel, and crushed rock for base and sub-base horizontal construction requiring high load-bearing capacity. Some of these missions include constructing/repairing roads, airfields, storage areas, base preparation of storage areas and handstand. It will replace existing compacting equipment. It comes in two sizes, a smaller one to support light and airborne units, and a standardized one for other units. This is a reprocurement and will be processed as a non-developmental item.

Volcano	III	PM, MCD	PFDOS	DSA, TACOM	COL(P)

Scatterable (M139 Dispenser) surface laid mine system consisting of the following: M87 Canister containing 1 AP and 5 magnetic fuze AT mines; M88 practice canister containing expendable dummy mines; M89 training canister which simulates mine dispensing timing and sequencing; and the M87A1 which incorporates improved producibility and countermeasure resistance.

Water Items less than $2M each	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

The equipment procured with this "basket" program supports the Army mission of providing potable water to soldiers in the field. It provides life sustaining water to the front line and remote units in tactical environments. In addition to consumption, those items support personal hygiene, emergency medical conditions, equipment maintenance, and nuclear, biological and chemical decontamination. The program includes a wide variety of low unit cost, high usage items such as water tanks, pumps, water purification, storage and distribution systems. Each has an annual procurement of $2 million or less.

Water Quality Analysis Set-Purification	III	PM, PAWS	PFDOS	DSA, TACOM	COL(P)

Analyzes water for total dissolved solids, turbidity, pH, temperature and chlorine residual using the latest microcomputer and electronic techniques. It is used to monitor ROWPU operations and to establish degree of treatment needed on raw water sources.

Water, Individual Purification System	III	PM, PAWS	PDRR	DSA, TACOM	COL(P)

This program will develop a water purifier to be used by small troop units located away from traditional supply chains. The unit will consist of portable modules, which when combined, will be capable of producing 50-150 GPH of potable water from any feedwater source.

Wide Area Mine (WAM)	II	PM, MCD	EMD	DSA, TACOM	COL(P)

WAM is the Army's first generation of a smart, autonomous, top attack munition which will defeat various targets including tanks and both tracked and wheeled vehicles (mobility kill). The initial version includes various sensors (seismic and acoustic) to detect, classify and track a target. Once the target is validated by the internal control electronics and within the 100 meter lethal radius, the mine determines the optimum firing time. The upper portion of the ground platform tilts and fires a munition over the target. The target is acquired by the infrared sensor and a tantalum explosively formed penetrator is fired at the target. The initial version, identified as BASIC WAM, is hand emplaced and can be manually set or remotely set by a one way radio. The follow-on BLOCK I pre-planned product improvement WAM, C2 WAM, will have an advanced two way command and control capability (on-off-on), compound warhead and other sensor and ground platform advancements. The BLOCK I will be hand emplaced. Follow-on efforts planned for WAM in the next century will feature alternative delivery means for deep attack.

AMC Systems

AMC Systems

XM 84 Stun Grenade II	III	PM, Small Arms	PFDOS	DSA, TACOM	COL(P)

A diversionary device (hand grenade) designed to confuse, disorient or distract a potential threat with minimal force. Device can be used by tactical or non tactical forces. In support of Soldier Enhancement Program.

ORGANIZATION JPO, BD *Total: 3*

Program Title	*ACAT Level*	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Biological Integrated Detection System (BIDS)	III	PD, BD	PFDOS	JPM, BD	BG Cain

BIDS is an integrated biological detection suite employing complementary technologies for large area detection, identification and warning that a biological attack has occurred. The system is installed in an M-788 shelter which is mounted on an M-1097 HMMWV. BIDS is a three phased program. The first 38 BIDS NDI systems were fielded to the 310th Chemical Company in 4QFY96 . The second company of 38 BIDS P3I systems are being fielded to the 7th Chemical Company at Ft. Polk. Fielding will be completed 4QFY99 . The third company of 38 BIDS systems will be fielded with the Joint Biological Point Detection System (JBPDS) beginning in FY 01. The JBPDS is a common biological detection suite utilized by all the Services.

Joint Biological Point Detection System (JBPDS)	III	PM, JBPDS	EMD	JPM, BD	BG Cain

The JBPDS will develop and field a biological detection system that meets the needs of the Army, Navy, Air Force, and Marine Corps. The JBPDS is a Block development program. Block I focuses development on fully automating the bio suite. Block I will be capable of simultaneously and automatically presumptively identifying ten BW agents in less than 15 minutes. Block II will focus on decreasing size, weight and power consumption. The JBPDS will be integrated into each Service's platform (e.g., HMMV, ship) air base, or port to provide a common detection capability for joint interoperability and supportability. Production of the first 104 systems will begin in FY 00. Funding is available for 830 systems.

Joint Vaccine Acquisition Program (JVAP)	II	PM, JVAP	PDRR/PFDOS	JPM, BD	BG Cain

The JVAP is an effort to ensure a supply of vaccines and other medical products effective against validated biological warfare threat agents. The JVAP Prime System Contractor, DynPort LLC, will develop and test vaccine candidates for FDA Licensure. After FDA licensure, the contractor will produce, test, store, and distribute these products as required by the Services to protect U.S. forces.

ORGANIZATION PEO, AMD *Total: 5*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Joint Tactical Ground Station (JTAGS)	III	PM, JTAGS	PFDOS	PEO, AMD	COL(P) Urias

The Joint Tactical Ground Station (JTAGS) is a transportable information processing system which receives and processes in-theater, direct down-linked data from Defense Support Program (DSP) satellites and the follow-on Space-Based Infrared System (SBIRS). JTAGS disseminates warning, alerting and cueing information on Tactical Ballistic Missiles (TBMs) and other tactical events of interest throughout the theater using existing communication networks. JTAGS supports all Theater Missile Defense (TMD) pillars (attack operations, active defense, passive defense, and battle management/command, control, communications, computers, and intelligence (BM/C4I) and, by being located in-theater, provides the shortest sensor to shooter connectivity. P3I efforts are underway to integrate the Joint Tactical Information Distribution System (JTIDS), fuse sensor data with DSP, and upgrade JTAGS to operate with the next generation of SIBRS.

Medium Extended Air Defense System (MEADS)	ID	PM, MEADS NPO	PDRR	USD(A&T)	Dr. Gansler

The Medium Extended Air Defense System (MEADS) will provide lower tier air, theater missile defense, and cruise missile defense to the maneuver forces and other critical forward deployed assets throughout all phases of tactical operations. MEADS will operate both in an enclave with upper tier systems in areas of debarkation and assembly and provide continuous coverage alone or with Forward Area Air Defense systems in the division area of the battlefield during movement to contact and decisive operations. MEADS will utilize a combination of a netted and distributed architecture, modularly configurable battle elements, interoperability with other airborne and ground based sensors, and improved seeker/sensor components to provide a robust 360 degree defense against the full spectrum of TBM, cruise missile, unmanned aerial vehicle, TASM, rotary wing, and forward wing threats. The Army is Executive Agent for this DoD ACAT ID BMDO program

National Missile Defense (NMD) Ground Based Elements (GBE)	ID	PM, GBE	PDRR	USD(A&T)	Dr. Gansler

The National Missile Defense (NMD) system will provide highly effective protection of the fifty United States, power projection forces, population, and industrial base against limited strategic ballistic missile attacks. The United States currently has no defense against intercontinental strategic ballistic missile threats. The initial fixed-site, ground-based NMD system will be capable of conducting multiple, simultaneous, over-the-horizon, hit-to-kill intercepts of threat warheads. The threats will be destroyed in their midcourse phase of flight at long ranges well outside the earth's atmosphere for effective protection on the ground. The initial NMD system consists of the dedicated Ground Based Elements that will operate in conjunction with the Integrated Tactical Warning and Attack Assessment System (ITW/AA) in Cheyenne Mountain. The ITW/AA system is supported by the Defense Support Program (DSP), the Space Based Infrared System (SBIRS), and Upgraded Early Warning Radars (UEWR). The Ground Based Elements consist of the Ground Based Interceptor (GBI), the X-Band Radar (XBR), and part of the Battle Management, Command, Control, and Communications (BMC3). The initial system will include 20-100 GBI missiles, one or more XBRs, Execution Level BMC3 at the Deployment Site(s), and Command Level BMC3 in Colorado Springs integrated with the ITW/AA System. The GBI is a dormant, long-range, high-velocity, hit-to-kill missile consisting of an Exoatmospheric Kill Vehicle (EKV) on a three-stage, solid-rocket booster with associated command, launch, and support equipment. The EKV includes a multi-color, long-wave infrared sensor subsystem; inertial guidance, navigation, and control subsystem; and divert and attitude control subsystem. The XBR is a wide bandwidth, solid state, phased array radar that provides precision long-range acquisition, tracking, discrimination, and hit assessment. The BMC3 provides highly-automated, fault-tolerant engagement planning and decision aids for the operators, inter- and intra-site connectivity including the NMD Communications Network (NCN), and the In-Flight Interceptor Communications System (IFICS) that provides target updates and target object maps to the interceptor after launch. The NMD program is a joint service program led by the Ballistic Missile Defense Organization (BMDO). The Army is the BMDO Executive Agent for the dedicated Ground Based Elements of the ACAT ID Joint NMD Program. The Army (active and reserve components) will field, operate, and sustain the Ground Based Elements.

Patriot Advanced Capability (Patriot PAC-3)	ID	PM, Patriot	PFDOS	USD(A&T)	Dr. Gansler

The Patriot Missile System provides high- and medium-altitude air defense capability for critical assets and maneuver forces belonging to the corps and to echelons above corps. The Patriot Advanced Capability-3 (PAC-3) missile is a high velocity hit-to- kill, surface-to-air missile capable of intercepting and destroying both maneuvering and non-maneuvering tactical ballistic missiles and air breating threats such as cruise missiles and aircraft. The Pac-3 missile provides the range, accuracy, and lethality to effectively defend against tactical missiles with conventional high explosive, biological, chemical, and nuclear warheads. The missle uses a solid propellant rocket motor, areodynamic vane controlls, and inertial guidance to navigate to an intercept point. Just prior to intercept, the missile's rate of spin is increased, the on-board radar homing seeker acquires the target, and terminal homing guidance is initiated to achieve hit-to-kill by high resolution maneuvers. The PAC-3 system upgrade, along with the PAC-3 missile, will provide an advanced anti-tactical missile capability to the current fielded system.

The combat element of the Patriot Missile System is the fire unit, which consists of a phased array Radar Set (RS), an Engagement Control Station (ECS), an Electric Power Plant (EPP), an Antenna Mast Group (AMG), and eight remotely located Launching Stations (LS). The RS provides all tactical functions of airspace surveillance, target detection and tracking, and missile guidance. The ECS provides the human interface for command and control of operations. Currently, each launcher contains four ready-to-fire missiles, sealed in canisters which serve a dual purpose as shipping containers and launch tubes. Patriot’s fast reaction capability, high firepower, ability to track 50 targets simultaneously, and the ability to operate in a severe electronic countermeasures environment are features not available in previous air defense systems. The PAC-3 upgrade program will incorporate significant upgrades to the RS, ECS, and will include up to 16 advanced hit-to-kill missiles on three to four of the eight launchers per firing battery, thus increasing fire power and ballistic missile defense capabilities.

The Army is the Executive Agent for this DoD ACAT ID program which is a component of Ballistic Missile Defense Organization programs

Theater High Altitude Area Defense (THAAD)	ID	PM, THAAD	PDRR	USD(A&T)	Dr. Gansler

The Theater High Altitude Area Defense (THAAD) system will fill the void of a theater wide area defense of tactical ballistic missile threats, including weapons of mass destruction, operating in the endo and exo atmosphere and directed against military forces and strategic geopolitical assets. The THAAD system consists of missiles, launchers, Battle Management/Command, Control, Communication, and Intelligence (BM/C3I) elements, radars, and support equipment. The missile is a hypervelocity, single stage, solid propellant booster and a unique endo-/exo-atmospheric kill vehicle (KV). The hit-to-kill technology KV, designed to destroy threat warheads, guides to the target using an infrared homing seeker. The launcher uses the Army standard Palletized Loading System (PLS) 16-ton truck with a capacity of at least 8 missile rounds on a missile pack. The HMMWV based BM/C3I centers are a set of highly robust and configurable shelters to ensure maximum flexibility on the modern battlefield. These units interface and coordinate with the Theater Air Defense C2 system and will control both the Engagement and Force Operations for the THAAD system. The BM/C3I will provide automated acquisition and identification of TBM threats, process and disseminate track data, assign weapons, monitor engagements, and guide sensor operations. The THAAD X-band phased array radar acquires the target at long ranges, tracks the target and provides in-flight updates to the THAAD interceptor prior to intercept. The radar also performs kill assessment to support the decision to commit additional interceptors or to cue lower tier systems such as the Patriot System. The THAAD System will support passive defense and attack operations by providing impact point predictions and launch point estimations. The THAAD system will be fully transportable by C141/C5/C17 military aircraft. Once in theater, the system will use Army standard movers to be highly mobile on highways and unimproved roads. These system capabilities will allow THAAD to be rapidly deployed to any theater on short notice. Current plans call for a User Operational Evaluation System (less missiles) that has been in the hands of the soldiers since 1996 to gain user input into the final system design and to provide a Commander In Chief with a complete prototype system to use in the case of an emergency by FY 2007. The Army is the Executive Agent for this DoD ACAT ID program which is one of the Ballistic Missile Defense Organization programs.

ORGANIZATION **PEO, AVN** *Total: 22*

Program Title	*ACAT Level*	*Program Mgr*	*Current Phase*	*MDA*	*MDA Name*
Advanced Laser Eye Protection System	III	PM, ACIS	EMD	PEO, AVN	MG Snider

The objective of the program is to develop a day/night, multiple wavelength, low energy visor to address the needs of fixed and rotary wing aircrews in a fixed, multi-wavelength laser threat environment. This visor must be compatible with current Navy/Marine Corps and Army ALSE.

Advanced Threat Infrared Countermeasure Munition (AIRCMM)	III	PM, ATIRCM	EMD	PEO, AVN	MG Snider

The AIRCMM is an advanced aircraft infrared expendable device which is multispectral in nature and will be a replacement and/or enhancement for the standard Army M-206IR decoy. The AIRCMM is backward compatible with the M-130 General Purpose Dispenser and provides a payload identification capablity with the Advanced Expendable dispenser part of the Advanced Threat Infrared Countermeasure (ATIRCM).

Advanced Threat Infrared Countermeasures / Common Missile Warning System (ATIRCM/CMWS)	IC	PM, ATIRCM	EMD	AAE	Mr. Hoeper

Airborne countermeasure self-protection systems which detect both infrared (IR) and radio frequency (RF) missiles using advanced imaging technology and protect aircraft against IR missiles through the use of laser and lamp. This is a joint program with the Army as lead service.

AIHS Laser Eye Protection Visor	III	PM, ACIS	PFDOS	PEO, AVN	MG Snider

The AIHS Laser Eye Protection Visor is a two visor system that provides protection from 2 and 3 wavelengths (notches) of laser hazards. The 2 notch visor provides protection against two laser wavelengths and provides adequate ambient light transmittance to be flown at night. The 3 notch visor provides protection against three laser wavelengths. While the 3 notch visor provides additional laser protection as compared to the 2 notch visor, it is too dark to be used at night. This item is currently being fielded with the HGU-56/P Helmet.

Air Warrior (AW)	III	PM, ACIS	EMD	PEO, AVN	MG Snider

This program is a multi-dimensional effort, designed to enhance the aircrew warfighting capabilities by providing the airvcrew with a systems approach to integration of aircrew life support, survival equipment, and aircrew life support, survival equipment, and aircrew/aircraft interface equipment and tailorability of aircrew equipment to specific missions. MS III is planned for FY 02.

Airborne Command and Control System (A2C2S)	III	PM, AEC	EMD	PEO, AVN	MG Snider

The A2C2S functions as a highly mobile airborne command post when mounted in the UH-60 helicopter with auxiliary equipment, providing tactical voice, data, and imagery digitized battlefield communications both in secure and non-secure modes for corps, division, and brigade commanders. The system provides battle commanders and intercommunications facilities for up to six operators, and joint interoperability as well as maritime and air traffic control communications.

Aircrew Integrated Helmet System (AIHS)	III	PM, ACIS	PFDOS	PEO, AVN	MG Snider

The AIHS has the Tri-Service designation as the HGU-56/P (Head Gear unit -56th version Pilot) and will replace the existing SPH-4 and 4B helmets. It offers twice the head impact protection and comes in six sizes for fitting the smallest female (1%) through the largest male (99%) aircrew members. Fielding of the HGU-56/P continues during FY99.

Aircrew Integrated Helmet System (AIHS-P3I)	III	PM, ACIS	EMD	PEO, AVN	MG Snider

This program develops improvements to the AIHS HGU-56/P helmet. Preplanned improvements include lighter weight, noise reduction, and improved communications. The current P3I efforts being pursued include an Apache Magnetic Head Tracker to replace the current IHADSS helmet and a Comanche compatibility effort, and Virtual Retinal Display development.

AN/APR-48A Radar Frequency Interferometer (RFI)	III	PM, AAH	PFDOS	PEO, AVN	MG Snider

This radar frequency interferometer is a passive target acquisition system that provides accurate bearings to threat air defense artillery emitters. The system detects, classifies, and prioritizes radar emitters. It cues target acquisition systems, allows rapid target handover, and can provide information on the status of the detected emitter (search, acquisition, and track). The system consists of two major components; a receiver/antenna assembly and a processor. The system will use onboard displays to provide information to the aircrew.

AN/ARC-220 High Frequency (HF) Nap-of-the-Earth (NOE) Communications Radio	III	PM, AEC	PFDOS	PEO, AVN	MG Snider

High Frequency Nap-of-the-Earth Communications (HF NOE COMM) radios are required to satisfy critical Desert Storm operational deficiencies for long range and "over-the-hill" connectivity for both voice and data for Army aircraft. The AN/ARC-220 HF radio has been competitively procured with Automatic Link Establishment capability to replace difficult manual searches for workable frequencies, night vision compatible lighting and Electronic-Counter-Countermeasures (ECCM) capabilities.

AN/AVR-2A(V) Laser Detecting Set (LDS)	III	PM, ATIRCM	PFDOS	PEO, AVN	MG Snider

The AN/AVR-2A(V) Laser Detecting Set is a passive laser detecting system which receives, processes, and displays threat information resulting from aircraft illumination by lasers. The threat information is displayed on the AN/APR-39 Radar Detecting Set indicator.

AN/TPQ-45 Aircraft Survivability Equipment Trainer IV (ASET IV)	III	PM, ATIRCM	PFDOS	PEO, AVN	MG Snider

This trainer consists of ground based mobile threat emitters. The emitters simulate infrared and radar frequency defense systems (SA-7/14, SA-9/13, ZSU-23-4, SA-8 and C3). ASET IV presents the culmination of aircraft survivability equipment training providing realism under the "train as you fight" concept.

Aviation Mission Planning System (AMPS)	III	PM, AEC	PFDOS	PEO, AVN	MG Snider

The Aviation Mission Planning System is a planning/battle synchronization tool that will automate aviation mission planning tasks. It will also provide generation of mission data in either hard copy or electronic formats. The AMPS includes tactical command and control, mission planning, mission management, and maintenance management. The AMPS interfaces with the Maneuver Control System and associated networks. This interface will furnish the aviation commander with continuous situational awareness, allowing the commander to rapidly adjust his plan to accomplish his assigned mission.

Cockpit Air Bag System (CABS)	III	PM, ACIS	EMD	PEO, AVN	MG Snider

The CABS is a crash activated, inflatable protection system for application to the Army rotary wing Force Modernization fleet. It provides aircrew members improved crash survivability and reduced potential injuries and fatalities by rapid deployment during the onset of a crash, supplementing the current restraint system in a survivable crash. Joint Service application of CABS to similar aircraft is being pursued.

Comanche (RAH-66)	ID	PM, Comanche	PDRR	USD(A&T)	Dr. Gansler

The Comanche will perform the armed reconnaissance mission for attack helicopter and air cavalry units. The Comanche will significantly expand the Army's capability to conduct reconnaissance operations in all battlefield environments, adverse weather, and during day or night operations. The Comanche will protect the force using its advanced electro-optical sensors, aided target recognition, and sensor/weapons integration. Comanche's digital communications capacity allows interface with JSTARS and other joint sensors and weapons platforms. Comanche's design for rapid rearm, refuel, and repair will provide increased operation tempo. Low observability, target recognition, and digitized communications provide the capability to conduct deep precision strike missions against time sensitive targets. The Comanche will replace three types of helicopters currently performing the armed reconnaissance mission: AH-1, OH-58, and OH-6.

Doppler/GPS Navigation Set (DGNS)	III	PM, AEC	PFDOS	PEO, AVN	MG Snider

The DGNS provides Army Aviation utility and cargo aircraft with extremely accurate and secure location and velocity information critical to navigation. It also provides Universal Coordinate Time for communication systems and assists in situational awareness and prevention of fratricide.

Embedded Global Positioning System (GPS) Inertial Navigation System (EGI)	III	PM, AEC	PFDOS	PEO, AVN	MG Snider

The EGI provides Army Aviation scout and attack aircraft with extremely accurate and secure location and velocity information critical to navigation, target acquisition, fire support, assessment of enemy deployments, and logistical support. It also provides Universal Coordinated Time for communication systems and assists in situational awareness and prevention of fratricide.

Improved Cargo Helicopter (ICH) (CH-47F)	IC	PM, CH-47F	EMD	AAE	Mr. Hoeper

As the only U.S. Army heavy lift cargo helicopter, the mission of the CH-47D Chinook/Improved Cargo Helicopter (ICH) will be to transport weapons, ammunition, equipment, troops and other cargo in general support of combat units and operations other than war. The CH-47F Chinook/ICH cockpit will be upgraded to a new electronic architecture allowing seamless interface with other systems on the digital battlefield; the airframe will be structurally modified to reduce O&S costs; the aircraft will be remanufactured to extend its service life; and the engine will be upgraded to a more powerful and reliable T55-GA-714A turboshaft engine as the result of a separate CH-47D Chinook engine upgrade program.

Improved Data Modem (IDM)	III	PM, AEC	PFDOS	PEO, AVN	MG Snider

The IDM is a digital data link modem that exchanges targeting data between the various weapon systems in support of the following missions: suppression of enemy air defenses; close air support; forward air control; air combat and command. It is a Joint Service Program that will enhance digitization of the battlefield fusion of information, system integration and access to real-time fused intelligence.

Longbow Apache (AH-64D)	IC	PM, AAH	PFDOS	AAE	Mr. Hoeper

The AH-64D attack helicopter is a twin engine, four-bladed, tandem seat, aerial weapons platform. It is designed to accomplish a variety of missions in day, night, and adverse weather conditions ranging from desert heat to arctic cold. The weapon systems include the 30mm automatic cannon, 2.75 inch aerial rockets, and the Hellfire modular missile system. The aircraft is a remanufactured AH-64A Apache, modified to accept the Longbow Weapon System (LBWS). Consisting of a millimeter wave fire control radar and the associated missile with a radar seeker, the LBWS adds the capability to detect and engage targets in adverse weather and in the presence of battlefield obscurants. It also provides an fire-and-forget capability, resulting in a vast increase in both lethality and survivability. The AH-64D is currently in production. First Unit Equipped (FUE) was 1-227 Avn from 1st Cavalry Division in July, 1998. The battalion became mission-ready (Initial Operating Capability) 18 November 1998. The next battalion, the 2-101 Avn from the 101st Airborne Division, is currently being fielded.

M43A1(P31) Mask - Lightweight Motor Blower (LWMB)	III	PM, ACIS	PFDOS	PEO, AVN	MG Snider

This is a small, aircrew mounted motor blower that provides at least two (2) cubic feet per minute of airflow to the M43 series aircrew member's Chemical/Biological protective mask. This Program is making maximum use of off-the-shelf materiel and will meet electromagnetic interference and emergency egress requirements as well as all supportability, reliability, maintainability, and durability requirements of U.S. Army aircraft. Production deliveries are complete. This item will be fielded as part of the Chemical/Biological Mask which it works with.

Suite of Integrated Radio Frequency Countermeasures	III	PM, ATIRCM	EMD	PEO, AVN	MG Snider

The SIRFC system will provide active and passive Electronic Countermeasure (ECM) protection against Radio Frequency (RF) threats. The system is designed to meet operational requirements for a modular radio frequency countermeasure system capable of providing situational awareness, radar warning and jamming countermeasures. The system is being developed for all Army aircraft.

ORGANIZATION PEO, GCSS *Total: 20*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
120mm M829A2 APFSDS-T	III	PM, TMAS	PFDOS	PEO, GCSS	MG Michitsch
The M829 is the world's most lethal kinetic energy round. It is the Abrams Tank's primary anti-armor cartridge. It incorporates thick walled graphite composite sabots, high density stick propellent, and a depleted uranium penetrator.					
120mm M829E3 APFSDS-T	II	PM, TMAS	EMD	PEO, GCSS	MG Michitsch
The M829E3 is a kinetic energy round being developed to counter explosive reactive armor advancements expected to be fielded early in the next century. Advancements in propulsion and penetration are key elements of this program.					
120mm M830A1	III	PM, TMAS	PFDOS	PEO, GCSS	MG Michitsch
Multi-Purpose/HEAT Cartridge					
This round utilizes a sub-calibered saboted warhead which results in increased velocity, shortened time of flight, and higher hit probability. It represents a major breakthrough in HEAT ammunition in terms of range and performance. The M830A1 has an anti-helicopter capability.					
155mm M795 High Explosive	III	PM, ARMS	PFDOS	PEO, GCSS	MG Michitsch
The M795 Projectile consists of 28.3 pounds of TNT explosive loaded into a high fragmentation steel body assembly. The projectile can use a variety of fuzes (point detonating, mechanical/electronic time and proximity). It will be used for conventional fire support and will supplement the currently stockpiled 155mm HE M107. It provides greater range and lethality than the M107 and will be used as a registration round for the M483A1 family of conventional munitions. The M795 is in production.					
Abrams Upgrade	IC	PM, Abrams	EMD/PFDOS	AAE	Mr. Hoeper
The Abrams tank closes with and destroys enemy forces on the integrated battlefield using mobility, firepower, and shock effect. The M1A2 program provides the Abrams tank with the necessary improvements in lethality, survivability, and fightability required to defeat advanced threats. The M1A2 includes a Commander's Independent Thermal Viewer, an Improved Commander's Weapon Station, position navigation equipment, a distributed data and power architecture, embedded diagnostic system, improved fire control system, and a radio interface unit that allows, through the SINCGARS radio, rapid transfer of digital situational data and overlays to compatible systems on the digital battlefield. Production of new Abrams for the U.S. Army is complete. In lieu of new production, the Army is upgrading approximately 1,000 older M1 tanks to the M1A2 configuration. A multiyear procurement for 600 M1A2 upgrades was awarded in July 1996. Further M1A2 improvements, called the System Enhancement Program (SEP), are underway to enhance the tank's digital command and control capabilities and to add second generation forward looking infrared (FLIR) sensors to the thermal sights to improve the tank's fightability and lethality. M1A2 SEP tanks are scheduled to begin fielding in 3QFY00. The M1A2 SEP is in EMD. The M1A2 is in Production.					
Advanced Tank Armament System	III	PM, TMAS	PDRR	PEO, GCSS	MG Michitsch
This program is developing and integrating state of the art armament technologies for the Abrams tank and other armored systems, including the Future Scout and Cavarly Vehicle. These technologies, including improved cannon and fire control, will give these systems the ability to see, hit and kill targets at extended ranges and maintain lethality overmatch over the threat.					
Bradley Fire Support Vehicle (BFIST)	III	PM, BFVS	EMD/LRIP	PEO, GCSS	MG Michitsch
The BFIST provides an integrated Bradley-based fire support platform that allows company fire support teams and battalion/brigade fire support officers to plan, coordinate, execute, and direct timely, accurate indirect fires.					
BRADLEY FVS Upgrade	IC	PM, BFVS	EMD	AAE	Mr. Hoeper
The Bradley M2A3 Infantry / M3A3 Cavalry Fighting Vehicle (IFV/CFV) provides infantry and cavalry fighting vehicles with digital command and control capabilities, significantly increased situational awareness, enhanced lethality and survivability, and improved sustainability and supportability. The Bradley A3 Low Rate Initial Production (LRIP) in July 1997.					

Bradley Linebacker	III	PM, BFVS	PFDOS	PEO, GCSS	MG Michitsch

The M6 Bradley Linebacker is a dedicated Forward Area Air Defense (FAAD) for the heavy maneuver forces that provides equivalent signature, survivability, and mobility. The system can engage and defeat a variety of threat platforms including rotary wing aircraft, unmanned aerial vehicles, cruise missiles, fixed wing aircraft, and other air defense systems. The Linebacker is a BFVS A2 ODS, modified by replacing the TOW launcher with a four-missile STINGER launcher. This modification provides the crew with the capability of conducting a ground-to-air engagement while remaining under armor protection. The Linebacker also incorporates the Forward Area Air Defense Command and Control System (FAADC2) software on a Handheld Terminal Unit (HTU). By integrating GPS and FAADC2 the Linebacker provides an automated Slew-to-Cue function.

Command and Control Vehicle	III	PM, BFVS	EMD	PEO, GCSS	MG Michitsch

The Command and Control Vehicle (C2V) is a fully tacked, armored system that will provide battalion-through-corps battle staffs a highly mobile, survivable, and reconfigurable platform capable of hosting current and future Command, Control, Communications, Computer, and Intelligence (C4I) systems. TheC2V integrates the following components: a modified M993 carrier, BFV 600 HP engine, TEC transmission, 10 meter mast system, primary power unit, armored enclosure, individual/collective Bio-Chem system, environmental control system, 1553 data bus, power distribution system, and a reconfigurable C4I Mission Equipment Package (MEP).

Crusader: Advanced Field Artillery System / Future Armored Resupply Vehicle (AFAS/FARV)	ID	PM, Crusader	PDRR	USD(A&T)	Dr. Gansler

Crusader is an indirect fire support "system of systems" consisting of a self-propelled howitzer and a dedicated resupply vehicle providing support fires to maneuver forces on the future battlefield. The howitzer is a 155mm Self Propelled Howitzer (SPH) system that provides a significant increase in artillery survivability, lethality, mobility, and operational capability and effectiveness through the use and integration of advanced technology in its subsystems and combat components. These technologies include: the modular artillery charge system, the autosettable multi-option fuze, and automated ammunition handling system. The SPH will deliver unprecedented firepower capabilities at extended ranges. The armored Resupply Vehicle (RSV) will provide the foundation for supply of ammunition and fuel for the SPH. Inserting high-payoff technologies in robotics, automation, expert systems, and vehicle electronics, the RSV will provide the necessary ammunition to meet expected firing rates; meet the goals for autonomous operations; and capitalize on cost and operational advantages of component commonality. These systems will displace the M109A6 Paladin and M992A2.

CTG, 25mm, M919	III	PM, TMAS	PFDOS	PEO, GCSS	MG Michitsch

The M919 is an enhanced armor piercing cartridge with increased penetration and range performance over older armor piercing cartridges that incorporates improved kinetic energy (KE) penetrator materials, consolidated propellants and lower parasitic mass components.

Family of Medium Tactical Vehicles (FMTV)	IC	PM, MTV	PFDOS	AAE	Mr. Hoeper

The Family of Medium Tactical Vehicles (FMTV) will fill the Army's medium tactical wheeled vehicle requirements. The FMTV consists of a common truck chassis that is used for several vehicle configurations in two payload classes. The Light Medium Tactical Vehicle (LMTV) is available in van and cargo variants and has a 2 1/2-ton payload capacity. The Medium Tactical Vehicle (MTV) has a 5-ton payload capacity and consists of the following models: cargo with and without materiel-handling equipment, tractor, wrecker, and dump truck. Both the 2 ½-ton and 5-ton trucks will have a companion trailer with the same payload capacity as the truck that tows it. Van and fuel and water tanker variants of the MTV will be developed concurrent with the production of other models. The FMTV will perform line haul, local haul, unit mobility, unit resupply and other missions in combat, combat support, and combat service support units. Vehicles will operate worldwide on primary and secondary roads and trails. The FMTV will replace overaged and maintenance-intensive trucks currently in the fleet.

Medium Tactical Vehicle Replacement Program (MTVR) (USMC)	II	PM, MTV	EMD	PEO, GCSS	MG Michitsch

The MTVR replaces the existing medium tactical motor transport fleet of M809/M939 series trucks with cost-effective, state-of-the-art, technologically-improved trucks. Major improvements include a new electronically controlled engine/transmission, independent suspension, Central Tire Inflation System (CTIS), antilock brakes, traction control, corrosion control, and safety/ergonomic features. This program is managed by the Army for the Marine Corps.

Modular Artillery Charge System (MACS)	III	PM, Crusader	EMD	PEO, GCSS	MG Michitsch

The Modular Artillery Charge System (MACS) is intended for use with fielded 155mm field artillery systems equipped with M199 and M284 39 caliber cannons and the XM297 cannon under development for use on Crusader. The MACS includes two different types of charge increments - the XM231 designed to achieve ranges in zones 1 and 2, and the XM232 designed to achieve ranges in zones 3-6. Each increment contains propellant, an ignition system, and performance enhancing additives that are loaded in a combustible case.

Multi-Option Fuze for Artillery (MOFA)	III	PM, Crusader	EMD	PEO, GCSS	MG Michitsch

MOFA will provide proximity, time delay and point detonation functions for 105mm, 155mm and bursting projectiles.

Projectile, 155mm Extended Range Dual Purpose Improved Conventional Munition (XM982)	III	PM, ARMS	EMD	PEO, GCSS	MG Michitsch

The XM982 is an extended range Dual Purpose Improved Conventional Munition (DPICM) 155mm artillery projectile. It will be compatible with all current and future 155mm artillery systems in the U. S. inventory. The XM982 will extend the range of the M198, M109A5, 155mm Paladin (M109A6), and the Light Weight Howitzer to approximately 37 kilometers. The XM982 with the Modular Artillery Charge System (MACS) extends the Crusader range to 47 kilometers. Survivability is increased by allowing greater stand-off from threats and faster defeat of potential threats.

Sense and Destroy Armor (SADARM)	IC	PM, ARMS	EMD/LRIP	AAE	Mr. Hoeper

SADARM is a fire-and-forget, multi-sensor, smart munition designed to detect and destroy counter-measured armored vehicles, primarily self-propelled artillery. It is effective in all weather and terrain. SADARM is delivered to the target area by 155 mm artillery projectiles. Each projectile carries two SADARM highly sophisticated submunitions. Once dispensed from its carrier, the intelligent submunition detects appropriate targets using dual-mode millimeter wave and infrared sensors. Because of the multi-mode sensor suite, the submunition is equally effective against desert background and winter snow. It fires a highly lethal explosively formed penetrator through the top of the target. SADARM is a gun-hardened submunition with the capability to be dispensed from a variety of carriers. SADARM was approved for Low Rate Initial Production following a Milestone III Defense Acquisitioin Board in Mar 1995.

Striker	III	PM, BFVS	EMD/LRIP	PEO, GCSS	MG Michitsch

The M707 Striker performs 24-hour terrain surveillance, target location, acquisition, and designation in heavy and light divisions. The system operates as an integral part of the brigade recon fight, providing Combat Observation Lasing Teams (COLTs) with fire support mission planning and execution. Striker consists of an M1025A2 armored HMMWV integrated with a Mission Equipment Package (MEP) that includes: Ground/Vehicular Laser Locator Designator (G/VLLD), AN/TAS-4B night sight, Handheld Terminal Unit (HTU), Lightweight Computer Unit (LCU) that hosts Forward Observer System (FOS) Software, and Inertial Navigation System (INS).

Towed Artillery Digitization (TAD)	III	JPM-LW155	PDRR	PEO, GCSS	MG Michitsch

The primary element of the TAD program is a "Digital Fire Control System" (DFCS). Other elements of the TAD program may include laser ignition (or other primer-less ignition system), powered or power assisted ramming, an ammunition handling device, and powered or power assisted elevation and/or deflection drives. The TAD program will have application to both Army and Marine Corps XM777 (LW155) howitzers, and may also be applied in whole or in part to the M198 howitzer, the M119 howitzer, and the Army's Future Direct Support Weapon System (FDSWS). The DFCS shall be a fully integrated digital fire control system providing position location, navigation, ballistic computation, muzzle velocity measurement, receiving and applying meteorological data, multiple fire mission storage and sequencing, system command and control functions, digital communications, electronic crew controls and displays, and some level of situational awareness.

ORGANIZATION PEO, IEW&S *Total: 23*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Advanced Quickfix (AQF)	III	PM, GBCS/AQF	EMD	PEO, IEW&S	MG Gust
AQF is a heliborne electronic attack, signals intelligence and emitter targeting system, currently in LRIP.					
Aerial Common Sensor	III	PM, ACS	CE	PEO, IEW&S	MG Gust
Aerial Common Sensor provides dedicated, corps-level, multi-disciplined intelligence, surveillance and reconnaissance (ISR) support for situation awareness, targeting and force protection under full range of operational scenarios. Combines the functionality of GRCS and ARL into single platform. This program is expected to be raised to ACAT I level.					
Airborne Reconnaissance Low (ARL)	III	PM, ACS	PFDOS	PEO, IEW&S	MG Gust
The ARL is a multifunction airborne day/night reconnaissance asset initially designed for low intensity conflict/counter narcotics/Operations Other Than War applications.					
Aviator's Night Vision Imaging System Heads Up Display (ANVIS HUD)	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust
The Heads Up Display (HUD) is a modification to the GEN III Aviator's Night Vision Imaging System which allows crew members to spend more time looking through their windshields and less time looking down at their instrument panels. The HUD places critical aircraft symbology as an overlay to their goggle image.					
Battlefield Combat Identification System (BCIS)	II	PM, CID	EMD	AAE	Mr. Hoeper
BCIS is a millimeter wave question and answer friend identification system to reduce battlefield fratricide.					
Ground Based Common Sensor (GBCS) / PROPHET	III	PM, GBCS/AQF	EMD	PEO, IEW&S	MG Gust
GBS consists of two parts:					
Ground Based Common Sensor - Heavy					
The Ground Based Common Sensor - Heavy is a vehicle mounted (Bradley variant) signals-intercept and precision emitter-location system that supports Armored and Mechanized Infantry Divisions.					
Ground Based Common Sensor - Light					
The Ground Based Common Sensor - Light is a vehicle mounted (HMMWV) signals-intercept and precision emitter location system that supports Light Divisions.					
Guardrail / Common Sensor (GR/CS), System 1, 2 and 4	IV	PM, ACS	PFDOS	PEO, IEW&S	MG Gust
GR/CS System 1, 2 and 4 is a corps-level SIGINT (COMINT & ELINT) collection and precision targeting system.					

Joint Surveillance and Target Attack Radar System Common Ground Station (JSTARS CGS)	ID	PM, Joint STARS	EMD	USD(A&T)	Dr. Gansler

The CGS is a mobile, tactical, multi-sensor ground station that receives, displays, processes, and disseminates targeting battle management and intelligence information to all echelons. In addition to Joint STARS radar data, the CGS is now capable of receiving and displaying Unmanned Aerial Imagery as well as signals intelligence data via an integrated Joint Tactical Terminal. Two previous variants, a Medium Ground Station Module (MGSM) mounted on a 5-ton truck and a light version (LGSM) mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV) will be decommissioned or upgraded to the CGS in CY99. The CGS is a HMMWV-mounted shelter system that features COTS hardware and software and represents significant cost savings compared to the GSMs. The CGS has an aggressive P3I program to keep pace with the improvements to the airborne Joint STARS platform, expand interoperability and improve exploitation of Intelligence, Surveillance and Reconnaissance data.

Joint Tactical Terminal (JTT)/Common Integrated Broadcast Service-Modules (CIBS-M)	III	PM, JTT/CIB	EMD	PEO, IEW&S	MG Gust

The Joint Tactical Terminal is part of the Integrated Broadcast Service link to battle managers, intelligence centers, air defense, fire support and aviation nodes across all services. It is a family of special application UHF line of sight/sattelite communications secure intelligence dissimenation reporting systems for deployment with tactical untis. The JTT allows users to exploit intelligence broadcast networks which include TRIXS, TIBS, TRAP, TADIXS-B. The equipment can be mounted in fixed and rotary wing aircraft as well as fixed or mobile ground platforms.

Lightweight Laser Designator/Rangefinder (LLDR) AN/PED-1	III	PM, NV/RSTA	EMD	PEO, IEW&S	MG Gust

LLDR has a day camera, Forward Looking Infrared (FLIR) thermal sensor, laser rangefinder, digital compass/vertical angle measurement device, global positioning system with video/digital outputs and a laser target designator for day/night acquisition, precise location and designation for engagement by a variety of munitions.

Lightweight Video Reconnaissance System (LVRS) AN/PVH 1&2	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

LVRS outstations capture still images in day or night and transmit those images through a military radio to a LVRS basestation.

Long Range Advance Scout Surveillance System (LRAS3)	III	PM, FLIR	PDRR	PEO, IEW&S	MG Gust

LRAS3 provides scouts with a long range day/night target acquisition and observation capability. It uses a Second Generation FLIR, laser range finder and global positioning system.

Monocular Night Vision Device (MNVD) AN/AVS-14	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

MNVD is a small tubular shaped single eye piece lens assembly with a state-of-the-art image intensification for amplifying low levels of starlight/moonlight for night operations.

Night Vision Systems--Mini Eyesafe Laser Infrared Observation Set (MELIOS)	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

Mini Eyesafe Laser Infrared Observation Set (MELIOS) is designed to meet all ranging requirements of the infantry and selected requirements of other branches and services out to ranges of 10KM with plus or minus 5M accuracy.

Night Vision Thermal Systems--The Driver's Vision Enhancer (DVE)	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Driver's Vision Enhancer (DVE) is a passive thermal imaging system designed to provide drivers of tactical wheeled vehicles with the capability to continue normal driving operations in all ambient light levels and in the presence of natural and man-made obscurants. DVE is currently in limited procurement.

Night Vision Thermal Systems--Thermal Weapon Sight (TWS)	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

Thermal Weapon Sight (TWS) is a class of low cost, lightweight, infrared imaging devices of medium to high resolution to be used for fire control of individual and crew served weapons during both daylight and darkness.

Second Generation FLIR, Horizontal Technology Integration (HTI)	II	PM, FLIR	EMD/LRIP	PEO, IEW&S	MG Gust

The objective of this program is to select, develop and demonstrate a greatly increased capability to fight during periods of reduced visibility. The 2nd Gen FLIR promises to provide better resolution and increased clarity at greater ranges than existing systems and will allow combined arms forces to see the same battlespace while achieving cost reductions through commonality and potential economies of scale. The 2nd Gen FLIR will be applied to the Bradley Fighting Vehicle, M1A2 Abrams and the Long Range Advanced Scout Surveillance System (LRAS 3).

Sentinel	IC	PM, Sentinel	PFDOS	AAE	Mr. Hoeper

The Sentinel system consists of the High Mobility Multi-purpose Wheeled Vehicle Group and the Antenna Transceiver Group mounted on a one-ton, wide-track trailer. Sentinel provides critical air surveillance of the forward areas; automatically detects, tracks, classifies, identifies, and reports target data to Short Range Air Defense weapon systems and battlefield commanders via the FAADC2I data link or directly from the Sentinel using the EPLRS or SINCGARS data radios.

Tactical Endurance Synthetic Aperture Radar (TESAR)	II	PM, TESAR	PFDOS	Air Force AE	Mr. Delaney

Tactical Endurance Synthetic Aperture Radar (TESAR) is an imagery system designed for use on unmanned aerial vehicles.

Tactical Unmanned Aerial Vehicle (TUAV)	II	PM, TUAV	PDRR	AAE	Mr. Hoeper

The TUAV is the maneuver commander’s "dominant eye" focusing on the close battle providing targeting, situation development and battle damage assessment. TUAV will replace manpower-intensive and high-risk front line monitoring systems such as remote sensors and ground-based radars. With its real-time video capability, the TUAV will give tactical ground commanders the capability to visualize more of the battlefield than ever before. Milestone I was approved on 7 Apr 99.

Third Generation Night Vision Systems--The Night Vision Goggle	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Night Vision Goggle is an individual, lightweight, high performance passive, third generation image intensifier system.

Third Generation Night Vision Systems--The Sniper Day/Night Sight	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Sniper Day/Night Sight provides snipers using the M24 rifle the capability to acquire and engage targets at night using a third generation image intensifier. This system converts to either day or night use by the flip of a switch that alternates as needed between a day sniper scope or the image intensifier for night viewing.

Third Generation Night Vision--The Aviator's Night Vision Imaging System (ANVIS)	III	PM, NV/RSTA	PFDOS	PEO, IEW&S	MG Gust

The Aviator Night Vision Imaging System provides aviators with night vision capabilities.

ORGANIZATION PEO, TAC MSL *Total: 9*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Advanced Anti-Tank Weapon System -- Medium (Javelin)	IC	PM, Javelin	PFDOS	AAE	Mr. Hoeper

Javelin is a man-portable, anti-tank system developed for the U. S. Army and U. S. Marine Corps. The system is highly lethal against tanks with conventional and reactive armor. Javelin has two major tactical components; a reusable Command Launch Unit (CLU) and a missile sealed in a disposable Launch Tube Assembly. The CLU incorporates an integrated day/night sight and provides target engagement capability in adverse weather and countermeasure environments. The CLU may also be used in the stand-alone mode for battlefield surveillance and target detection. The Javelin system weighs less than 49.5 lb. and has a maximum range in excess of 2,500 meters. Javelin's key technical feature is the use of fire-and-forget technology which allows the gunner to fire and immediately take cover. Additional special features are the top attack and/or direct fire modes (for targets under cover), integrated day/night sight, advanced tandem warhead, imaging infrared seeker, target lock-on before launch and soft launch. Soft launch allows Javelin to be fired safely from enclosures and covered fighting positions increasing gunner survivability. Javelin replaces the DRAGON.

Army Tactical Missile System -- Anti-Personnel Anti-Materiel BLOCKS I/IA (ATACMS--APAM)	IC	PM, Imp ATACMS	PFDOS	AAE	Mr. Hoeper

The Army Tactical Missile System (ATACMS) provides long-range, surface-to-surface fire support for U.S. Army Corps and Division operations. The ATACMS Blocks I and IA are ground-launched missile systems consisting of a surface-to-surface guided missile with an anti-personnel/anti-materiel (APAM) warhead. The ATACMS with APAM attacks soft targets at extended ranges. Targets include surface-to-surface missile sites, air defense systems, logistics elements, and command, control, and communications complexes. The ATACMS Block IA, with enhanced Global Positioning System (GPS) accuracy, has approximately twice the range of the ATACMS Block I. The contractor completed deliveries of the Block I missile in July 1997. Block I saw combat action in Southwest Asia during Operation Desert Storm effectively destroying high priority targets. Block IA will begin fielding in FY98, and retrofit of existing launchers to Block IA capability will occur simultaneously with missile fielding.

Army Tactical Missile System -- Brilliant Anti-Armor Submunition (ATACMS-BAT)	ID	PM, ATACMS-BAT	PFDOS	USD(A&T)	Dr. Gansler

The Army Tactical Missile Systems (Army TACMS) provides long-range, surface-to-surface fire support. The Army TACMS Blocks I and IA are ground-launched missile systems consisting of a surface-to-surface guided missile with an anti-personnel/anti-materiel (APAM) warhead. The Army TACMS with APAM is used to attack soft targets at extended ranges. Army TACMS missiles are fired from the modified M270 launcher and are capable of engaging targets at ranges well beyond the capability of existing cannons and rockets. The Army TACMS Block 1A, with enhanced GPS, has approximately twice the range of the Army TACMS. The Army TACMS block II is a modification of the currently fielded and combat proven Block I missile family. The Block II will deliver 13 BAT or P3I BAT submunitions deep into enemy territory where they will autonomously attack and destroy numerous high-payoff targets. The Army TACMS Block IIA is an extended range version of the Block II missile and will carry 6 P3I BAT submunitions to significantly extended ranges.

Extended Range Rocket (ER-MLRS)	III	PM, Precision Guided Munitions	PFDOS	PEO, Tac Msl	BG Holly

ER-MLRS is a free-flight, area fire, artillery rocket designed to complement the capabilities of the MLRS. Its mission is to engage targets beyond the range of the existing MLRS rockets up to a range of approximately 45 kilometers. Greater range is obtained by lengthening the motor section to accommodate more propellant and incorporating the M451 Remote Settable Fuze which allows higher altitude flight. Accuracy is improved through the use of no-load detent bolts in the launch pods to reduce launch tip off errors and a launcher-mounted meteorological sensor to provide updated wind data to the fire control computer. The shortened payload section will house new XM85 Dual Purpose Improved Conventional Munition grenades equipped with electronic self-destruct fuzes to reduce hazardous duds for improved maneuver force safety. Current guidance is to produce a limited number of ER-MLRS until the Guided MLRS Rocket enters production in FY02.

Guided MLRS Rocket (GMLRS) - XM30	III	PM, Precision Guided Munitions	EMD	PEO, Tac Msl	BG Holly

Guided MLRS (GMLRS) is a major upgrade to the M26 series MLRS rocket with the objective of integrating a Guidance and Control (GMC) package and a new rocket motor to achieve greater range and precision accuracy. The improvement in accuracy will reduce the number of rockets required to defeat targets to maximum range (approximately 60 km), reduce the number of launchers required per fire mission, and directly contribute to reducing the logistics burden. Guidance will be performed by a low-cost, tactical-grade Inertial Measurement Unit (IMU) designed to be aided by an optional GPS receiver. Control will be accomplished by four canards driven by electromechanical actuators. Required accuracy will be met with the IMU in an independent mode. GPS is not mission-essential, but provides a further increase in accuracy when used in conjunction with the IMU. The precision provided through the addition of the guidance and control package reduces the payload to 400+ grenades.

High Mobility Artillery Rocket System (HIMARS)	II	PM, HIMARS	*	PEO, Tac Msl	BG Holly

HIMARS will is a C-130 transportable, wheeled, indirect fire rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) Family of Muntions (MFOM). HIMARS is designed to carry a single Launch Pod Container (LPC) containing six rockets, or one Guided Missile Launching Assembly (GMLA) containing one Army Tactical Missile system (ATACMS) missile. The LPC/GMLA is carried on the chassis of the Army's Family of Medium tactical Vehicles (FMTV) 6x6 all-wheel drive M1096 Series, 5-ton truck. The HIMARS will provide tactical and operational fire support during both offensive and defensive operations, and be used to engage and defeat tube and rocket artillery, air defense concentrations, trucks, light armor and personnel carriers, as well as support troop and supply concentrations.

* Program is currently an Advanced Technology Demonstration (ATD).

Improved Target Acquisition System (ITAS)	III	PM, ITAS	EMD	PEO, Tac Msl	BG Holly

ITAS is a technology insertion program utilizing 2nd GEN FLIR technology to upgrade the current HMMWV/ground mounted TOW Target Acquisition and Fire Control subsystems. The ITAS will provide improved target detection and acquisition range, improved probability of hit and enhanced fire control capabilities. These will upgrade the anti-armor capabilities of light forces using the TOW system, allowing the Army to own the night and providing a bridge for compatibility with the next generation missile. The ITAS design provides growth potential for digitized applications and a bridge to the Follow-On To TOW (FOTT) missile. On 28 Sep 98, First Unit Equipment was executed to the 82d Airborne Division. Milestone III decision is programmed for May 1999.

Longbow HELLFIRE AGM-114L	IC	PM, Air to Grnd Msl Systems (AGMS)	PFDOS	AAE	Mr. Hoeper

The Longbow HELLFIRE missile is a fire-and-forget missile which uses radar-aided inertial guidance. It is part of the Apache AH64D Longbow system which also includes a mast-mounted millimeter wave fire control radar with associated electronics designed to greatly increase the survivability of the host helicopter. LBHF will provide the capability to conduct battle both day and night, in adverse weather conditions, and with battlefield obscurants present. The Longbow HELLFIRE missile utilizes millimeter wave radar-aided inertial guidance to provide a lock-on before launch (LOBL) or lock-on after launch (LOAL) capability, depending on target range and velocity. Starting with the FY97 buy, an Insensitive Munitions Warhead was incorporated which improves survivability. It is planned that Longbow HELLFIRE missile also will be used on the Comanche. Longbow HELLFIRE is 69.2 inches in length and weighs 108 lbs. Weapon range is approximately 8km.

MLRS Upgrade	IC	PM, MLRS	EMD/PFDOS	AAE	Mr. Hoeper

The Multiple Launch Rocket System (MLRS) is an artillery weapon system that supplements cannon artillery fires by delivering large volumes of firepower in a short time against critical, time-sensitive targets such as counterbattery fire and suppression of enemy air defenses, light materiel, and personnel targets. The basic warhead carries improved conventional submunitions. However, the MLRS is capable of supporting and delivering all of the MLRS Family of Munitions (MFOM) including the Army Tactical Missile System (Army TACMS) weapons. Growth programs are under way to extend the range of the rocket system and to upgrade the fire control and launcher mechanical systems. The U.S. initial operational capability for MLRS was achieved in 1983. Current plans for improvement of the system include the M270A1 upgrade starting in FY98. This upgrade consists of the Improved Fire Control System (IFCS) and the Improved Launcher Mechanical System (ILMS) modifications. The IFCS will mitigate electronic obsolescence, and provide growth for future weapon systems. The ILMS will provide rapid response to time-sensitive targets by reducing the aiming time by 70 percent and the reload time by 50 percent. The IFCS and the ILMS are in the Engineering and Manufacturing Development Phase.

ORGANIZATION SMDC *Total: 2*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Ballistic Missile Targets Joint Program Office	III	PM, BMT JPO	*	SMDC	LTG Costello

As an integral part of the US Army Space and Missile Defense Command (USASMDC), the BMTJPO develops and provides ballistic missile targets for testing of critical Army, Navy, and Air Force missile defense systems and technology programs. The BMTJPO serves as the executing agent for the Ballistic Missile Defense Organization's (BMDO) Consolidated Targets Program. As such, it manages requirements analysis, acquisition, technical development, instrumentation, integration, and launch of all ballistic missile targets in support of Joint-Service theater and national missile defense requirements. The consolidated targets suite provides highly complex targets to support Major Defense Acquisition Programs (MDAP) such as Theater High Altitude Area Defense (THAAD), Patriot, Navy Theater Wide, Navy Area Wide, USAF Airborne Laser, and Ground Based Interceptor (GBI). It encompasses the use of a wide variety of targets necessary to replicate threat missile signatures for use as Theater Missile Defense targets, and many reentry vehicles, replicas, decoys, and penetration aids dispensed from the Multi-Service Launch System (MSLS) or the Strategic Target System (STARS) boosters for National Missile Defense targets. This office also provides close coordination of Army missile defense technologies to ensure that advancements in sensors, weapons, and other technologies are integrated into developing target systems.

* Due to the nature of the program, systems are in various acquisition phases.

Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)	II	PM, JLENS	PDRR	AAE	Mr. Hoeper

JLENS elevated sensors provide Over-the-Horizon (OTH) wide area surveillance and precision tracking (Fire Control) data to support the primary mission area of Land Attack Cruise Missile Defense (LACMD) through the use of the Air-Directed Surface-to-Air-Missile (ADSAM) concept and Combat Identification. Additionally, the system will support secondary mission areas of Attack Operations (Ground Moving Target Indicator) and Battlefield Communications.

ORGANIZATION TARDEC *Total: 4*

Program Title	ACAT Level	Program Mgr	Current Phase	MDA	MDA Name
Future Scout and Cavalry	Pre-MD AP	PM, CMS	CE	TBD	

Vehicles such as the High Mobility Multipurpose Wheeled Vehicle and Cavalry Fighting Vehicle which currently perform the scout mission were not initially designed to be scout vehicles. The US and UK are pursuing a joint demonstration program to provide the foundation for a Future Scout & Cavalry System that is operationally ready, survivable, mobile, deployable, lethal, and able to perform this mission. This ATD will develop the necessary interfaces to ensure compatibility among the scout technologies. The US/UK cooperative strategy calls for the competitive award of two ATD contracts. The demonstrators will be sufficiently robust so that the traditional demonstration and validation phase can be omitted, saving time and dollars.

Grizzly (Complex Obstacle Breacher)	II	PM, CMS	EMD	DSA, TACOM	COL(P)

The Grizzly is a combat mobility system capable of conducting in-stride breaches of rapidly emplaced complex linear obstacles. Grizzly incorporates countermine and counterobstacle capabilities in an M1 Abrams chassis-based system with agility and survivability comparable to the maneuver force. Grizzly features a full-width Mine Clearing Blade with automatic depth control. a Power Driven Arm, and an advanced vehicle architecture compatible with future digital battlefield command and control.

HERCULES (Heavy Recovery Vehicle)	II	PM, CMS	PFDOS	DSA, TACOM	COL(P)

The HERCULES is a full-tracked armored vehicle developed to support battlefield recovery of heavy tanks and other tracked combat vehicles (including future heavy combat vehicle systems). HERCULES is based on the M88 recovery vehicle chassis but incorporates significant improvements to towing, winching, lifting, and braking characteristics to allow it to conduct the primary mission of single vehicle recovery of the Abrams tank fleet.

Wolverine (Heavy Assault	II	PM, CMS	EMD/LRIP	DSA, TACOM	COL(P)

The Heavy Assault Bridge (HAB) is a 26 meter (85.3 ft.) Military Load Class 70 bridge transported on an M1A2 Abrams Tank Chassis. The bridge is capable of spanning gaps up to 24 meters on unprepared abutments. It is launched under armor within five minutes and can be retrieved from either end in ten minutes. The HAB is operated by two Combat Engineers and is employed by combined arms task forces in both offensive and defensive operations. Its mission is to provide gap crossing capability for heavy maneuver forces. It is planned to support Abrams Tanks and Bradley Fighting Vehicles and is comparable with these systems in mobility and survivability characteristics.